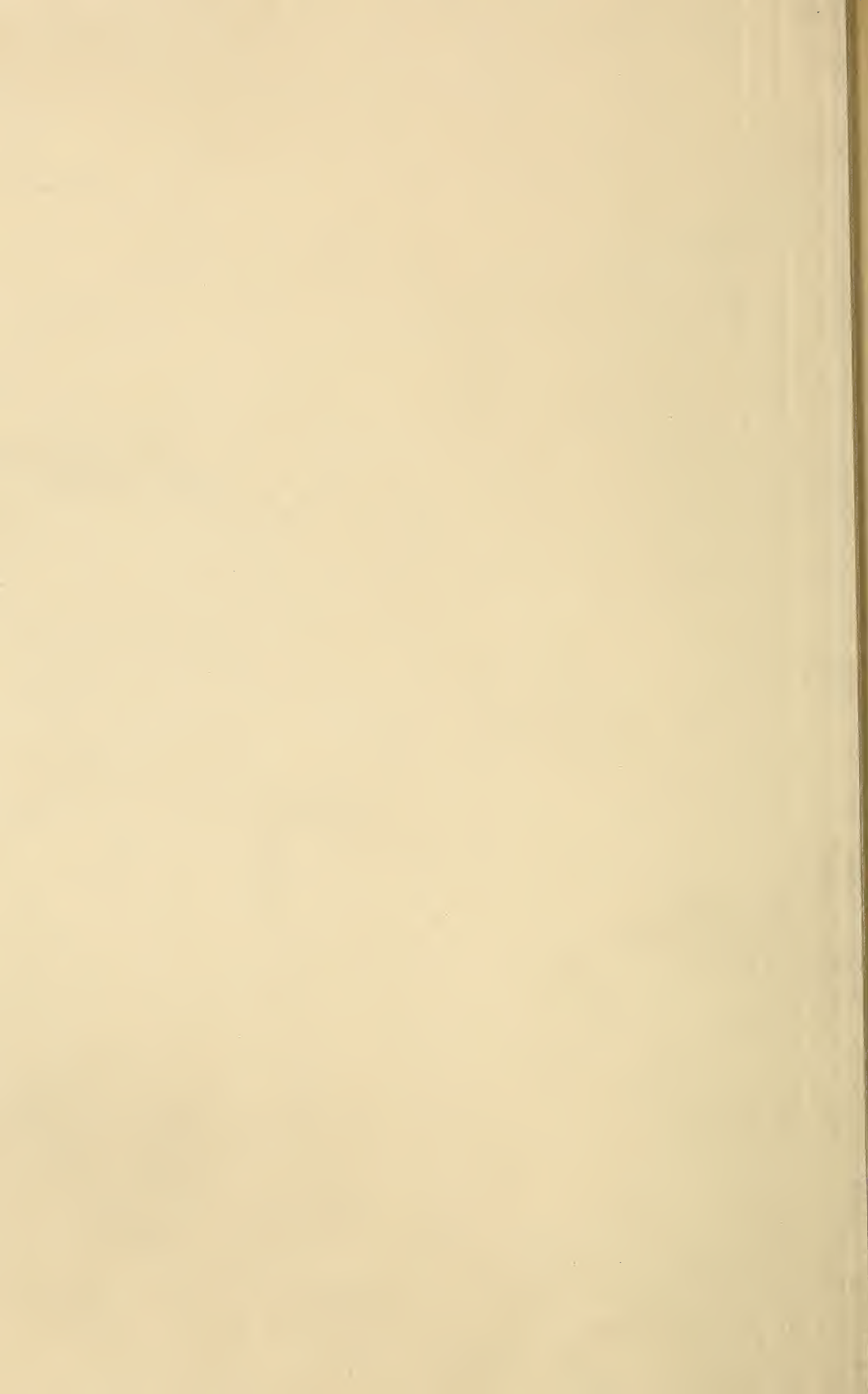


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# GLEANINGS

A JOURNAL DEVOTED  
TO BEES,  
AND HONEY,  
AND HOME  
INTERESTS.

## BEE CULTURE

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No. 16.



GLEANINGS looks very neat in her new suit. Easier to read too.

WIESBADEN is where the big convention of German bee-keepers will be. Wish I could be there!

ALFRED AUSTIN, England's poet laureate, is a member of the Kent Bee-keepers' Association—not an honorary member, but pays his subscription.

ANTS IN HIVES. M. Guilleminot, in *L'Apiculteur*, says he is successful in getting rid of ants by first removing what he can of their nests, then sprinkling well with finely crushed soot.

DID YOU EVER NOTICE that, in enlarging the brood-nest, the queen often lays first on the side of a fresh comb furthest from the brood-nest? I wonder why. [I never noticed it.—ED.]

TO THE QUESTION, whether it is possible and desirable to increase the length of tongue in our bees, nearly all repliers in *A. B. J.* agree as to desirability, and a large majority believe it possible.

THE BELGIAN GOVERNMENT has issued an order that all railway embankments shall be covered with honey-plants.—*Bienen-Vater*. May be that will happen here, if government runs the railroads.

BYRON WALKER is right about "even thickness of combs." The fact is, I'm so used to thinking of separators being used that I never thought of the great unevenness there might be without them. He's right, too, in thinking there may be too great economy of words in describing grades.

YOU ARE RIGHT, I think, Mr. Editor, p. 550, in thinking the bees would not have so readily capped over that honey if I had taken away all the brood-frames, leaving only full frames of honey; but there was no "putting-in of the frames of foundation in alternation," as you mention. It was frames of brood alternated with frames of honey.

IN REPLY to Mr. Craig's question, p. 573, I think fall is better than spring for sowing

sweet clover, and it most surely must be sown or self-sown every two years, for, like a parsnip, it grows one year without blooming, blooms the next year, then dies root and branch. So if bloom is wanted every year, seed must be sown or self-sown every year.

PROF. COOK favors a return to the old plan of having a few bees on every farm, rather than large apiaries in the hands of specialists.—*Rural Californian*. Which may and may not be all right if every farmer would keep bees. But if all the specialists were killed off, would it at all increase the number of farmers who keep bees?

MANY THANKS, friend A. I., for giving fits to the electrical thieves that are worse than pickpockets, and especially to their aiders and abettors, the religious press. Don't let up on the latter till they cease to be partners in crime. [Doctor, suppose you tell them the plain truth. We will furnish you all the marked sample copies you want. Perhaps a word from you would have more weight than from A. I. R.—ED.]

THE ARGENTINE REPUBLIC, as reported by A. Michaut in *Apiculteur*, is a paradise for bee-keepers—no failures from drought or moisture (except once in 12 or 15 years grasshoppers allow a quarter crop); no foul brood or other disease; no moth; abundant harvest for three months in the vast alfalfa fields, and an average yield of 75 lbs. a colony at 3 cts. a pound, and 3½ lbs. wax at 20 cts. Perhaps Prof. Bruner will tell us about it.

SHEEP are good to keep down grass in an apiary, but they move hives on their stands more than cows or horses. [I am sure your experience is different from that of Vernon Burt and the rest of us. Whenever a horse is stung in the vicinity of our apiary, there is usually a fracas, and a lively one too. The last experience our Meg had at our home apiary was when she kicked over two hives and had a runaway generally. Say, doctor, do your sheep kick?—ED.]

REV. M. MAHIN, D. D., has observed closely, and never found bees working on strawberry-bloom worth mentioning till this year; but this year they worked as freely on it as on clover. He thinks an unusually damp and cool spring accounts for it. [Two or three years ago a few insisted that bees never work on



strawberries. Others stated just as emphatically that they did. The truth of the matter is, some years bees do visit strawberry-blossoms, and some years they do not.—ED.]

GLASS COVERS for hives seem to have gone out of use at Medina; but at least two correspondents of the *British B. J.* like them after four years' trial. [Glass covers! I hardly know to what you refer unless you mean two that we used during winter, sealed down over the brood-nest, and covered with packing for experimental purposes. The result of the experiment that season seemed to show that bees did better under absorbents than under sealed covers. The glass was simply a matter of convenience.—ED.]

C. P. DADANT says, in *American Bee Journal*, "Why two Unions? Can't we lay aside all disputes and come together? I belong to both, and am willing to help both; but how much stronger we should be if we stood together as one man!" Vous avez raison, mon cher ami. [Just so; and I believe that nine-tenths of both organizations are with friend Dadant: Amalgamation is not given up by any means; and I hope the new constitution, at the next convention in Buffalo, may be so worded as to suit the most fastidious.—ED.]

SWEET CLOVER, it has been said, will drive out flies if the stalks are hung up in a house. Big bunches are hung in our honey-room, and the flies seem to enjoy roosting on it. [I do not see how sweet clover could drive flies out of the house; but I can readily imagine how the flies would like to roost on it. But why have flies in the honey-room at all? Why not have screens and screen doors? If you send one of your women-folks out to the house properly screened (house screened, not the woman), I will warrant she will bat the flies to death in very short order. I judge your women-folks by ours, for they are sure death to flies.—ED.]

HONEY is quoted by the gallon, p. 547, in the New York quotations. Wouldn't it be just as well to have nothing but pounds? [When honey is quoted by the gallon it usually means southern honey, or an inferior quality, for such honey usually sells in the South by the gallon. I believe with you that it would be better if it could always be sold by the pound, for on that plan the producer is paid just as much for thick honey as for thin. Or, to look at it in another way, a premium is put upon thick honey—the only kind that ought to be put on the market.—ED.]

I DON'T WONDER, Ernest, that you have come to the conclusion that you want all your queens clipped. So far as looks are concerned, it need make but little difference. Cut the big wing on one side, leaving the little one intact, and you'll have to look pretty closely to see that a queen is clipped. [Yes, I am thoroughly converted to your way of looking at the matter. Say, doctor, is it wrong for one to change his mind? or should he stick and hang to his originally published opinion, right or wrong? There are some people I know, and editors too, who *appear* to feel that the latter policy is the better one.

As for myself, even if it is a little humiliating once in a while, I expect to right about face just as soon as I know that the other fellow is right and I wrong. I really do not mean to give anybody a rap on the head; but it would be better for bee culture if there were more who are willing to change front.—After reading the foregoing it *sounded* very "goody-goody"—a little too much so, perhaps. Can't help it. I believe in the doctrine of conversion from the error of one's ways.—ED.]

IS THE ABILITY to build comb inborn, or do the young bees learn it from the older ones? Kokevnikow, a Russian, secured a lot of young bees that could never have seen comb built, and they made a finished job of comb-building the first time trying.—*Bienen-Vater*. [Exactly. The young bees will build just as good combs as the older bees, just the same as young cats and dogs can swim as well as old cats and dogs. The puppy spaniel that I had swam just as well the first day I threw him into the water as he did on other days months afterward when he swam out into the lake for his own pleasure after blocks of wood had been thrown out for him to bring in.—ED.]

THICK TOP-BARS and  $\frac{1}{4}$ -inch bee-space do well as regards burr-combs; but brace-combs between top-bars are plentiful. [As a general rule, there are comparatively few burr-combs over thick top-bars; and there are practically none when the spaces between them are  $\frac{1}{4}$  inch. But our friends and patrons do not seem to like to have the top-bars quite as wide as you do, and accordingly there are occasionally burr-combs as well as brace-combs. There is a great difference in colonies. We have one at our out-yard that sprinkled the burr and brace combs in pretty thickly between the sets of extracting-supers, but they are as one in five hundred. It is the exception that proves the rule.—ED.]

ALMOST SURELY, Mr. Editor, you are right in thinking your home apiary overstocked with 300 colonies and nuclei; but a comparison with the out-yard doesn't prove it, for a like comparison of my home apiary with the north apiary would prove the first overstocked, although the two are about equal. A short distance often makes a big difference. [What you say is true. During the early part of the honey-flow I was called to hive a swarm half a mile from our home yard. I then observed that our neighbor's bees, some two or three colonies, while only half a mile away, had about three times as much honey per hive as colonies of equal strength in our large home apiary. This led me to believe that two things were true: First, that the home yard was overstocked; second, that bees do not usually fly much over half a mile in quest of stores; and it is only when they can not get honey within this range that they will go further. So long as there is a little to be had near home, so long are they content with that little. But, "all the same," I do not believe it is wise to put out-aparies much nearer than two miles.—ED.]

## FIGHTING GLUCOSE IN CHICAGO.

The Plan Proposed on Pages 554, 555, Impracticable; the Legal Status of the Question.

BY HERMAN F. MOORE.

*Mr. Root:*—In regard to your plan to have Mr. W. A. Selser, of Philadelphia, make analyses of samples of suspected honey, it would not be best, as we could not use his evidence here in our courts without great expense in bringing him here to testify in person. No other mode of testimony would be satisfactory. The analyses must be made by some chemist near by, or in Chicago.

One thing to be remembered is, that there would be considerable expense connected with prosecuting these honey-mixers here in Chicago. It would be the best place on earth to make such a fight if made by one of our Bee-keepers' Unions, because the best advertised; and any action here would be at once communicated to the whole world of bee-keepers in all lands.

We must remember who are our foes here in the outset. I inclose a clipping from a Chicago paper about the *Glucose Trust*. A new incorporation of the G. T. has just been made in New Jersey, with \$40,000,000 capital stock. These people are pushing their business here in Chicago, as I believe \$1,000,000 worth a year of their products is consumed and handled through this city in a year. They would undoubtedly fight us tooth and nail. Their first fight would be to furnish unlimited money to hire the best lawyers in Chicago to defend any one arrested for mixing honey with glucose, and to pay their fines if convicted. If the bee-keepers desire to push this matter it would be necessary to provide not less than \$1000 in money at the start to pay necessary expenses. It would be necessary to *retain*, to aid in the prosecution of offenders, one of the best lawyers in Chicago—one whose name would carry prestige in the courts and before the people. To retain such a lawyer a liberal fee would be necessary.

I should like to see a decisive move made against the works (glucose) of the enemy; but it should be done in the proper manner, and with a force commensurate with the wealth and fighting qualities of the said enemy, or it had best be left alone. I should be glad to hear from Mr. York, as he is here among them, and knows the conditions as well as or better than I.

I will say, for the benefit of those who know me personally, that, though I am a lawyer, I am not in a position to represent the Bee-keepers' Union in such a prosecution, and have no thoughts of myself in the above remarks, though I should be glad to give them the benefit of any knowledge or experience I may have in the premises.

Chicago, Ill., Aug. 4.

[From your statement of the case it looks almost as if we were helpless. Although I am not a lawyer, nor the son of one, let us examine the matter a little from another point, for I feel as if we could not give it up. How will

this do? Employ Mr. Selser to analyze two dozen samples of extracted honey bought in the open market in Chicago. Suppose he finds one dozen of them to be adulterated. Would not this, coming from the Union, be sufficient evidence to induce the prosecuting attorney or the food commissioners of your State to bestir themselves a little, especially if the General Manager kept on dinging at them? Why, in the name or the good State of Illinois, is it necessary for the Union or any organization made up of private persons to defray the expense of prosecution that rightly belongs to the State? Ohio has an energetic food commissioner, and I have no doubt he had a constituency back of him who prodded him up to a sense of his duty; and those of us who live in this State *know* that he has made the food-adulterators fear and tremble. He even went so far that some of our "good people" actually began to protest, and they fairly begged him to "let up" on the poor persecuted mixers. The Union must not of itself assume the expense of prosecutions; but can we not give the Illinois State Food Commissioner, or whoever that functionary is, a little "waking up"?

It is too bad that the liquor element and the food-adulterators have got matters into such shape that it is hard to secure conviction; but the good people of our land must wake up, for the other side certainly are not asleep. Glucose and whisky, and all other enemies of the human stomach, must not triumph over right. —ED.]

## GLUCOSE, AGAIN.

BY R. M'KNIGHT.

I am surprised, Mr. Editor, that you too look upon glucose as vile stuff. You say, "The article that is ordinarily used for purposes of adulteration is hardly fit to put into the stomach of a pig, let alone that of a human being." I take it that the statement used in the above paragraph covers all articles "ordinarily used for the purposes of adulteration." In this you are certainly mistaken. Whisky, I believe, is usually adulterated with water; therefore water is unfit to put into the stomach of a pig. Coffee is usually adulterated with chickory, therefore chickory is vile stuff, unfit to be used by a human being. Mustard is adulterated with flour—your logic proves flour vile stuff. The sparkling diamond is chemically identical with the somber charcoal, so it will be in order for Cecil Rhodes and other diamond kings to denounce charcoal as vile stuff, and its producers scoundrels. Now that there is a large factory at Niagara Falls for manufacturing diamonds out of charcoal, all these adulterants are, I contend, legitimate articles of commerce, and their production is neither a fraud nor a sin. The fraud consists in mixing them with articles of a higher commercial value than themselves, and selling the mixed article for what it is not. The only proof you furnish that glucose is vile stuff is that it nauseated you once while



sampling honey mixed with it, and left you afflicted with "a horribly nasty taste" that clung to you for days. I have known people nauseated for days from sampling butter at a show-fair where all the butter was considered good. It is unfortunate that this article is believed to be largely used in adulterating honey in the United States. The practice is a fraud that ought to be stamped out, and I am pleased to learn that you are making progress in that direction. I believe that glucose, when properly refined, is not detrimental to health, and I am slow to believe that those who are engaged in its production are scoundrels. It is an extensive industry in your country. There is a line of steamboats running from Gladstone to this port that bring in tens of thousands of barrels of this "stuff" during the summer, and as many bags of grape sugar made from the same source. This is all through freight going to Britain and Europe. If it is used only as an adulterant the fraud must be widespread. One thing is certain—bee-keepers can not stop its production by calling it, and those engaged in producing it, ugly names. Perhaps your people have greater reason to feel sore over this matter. Honey adulteration is not practiced here to any appreciable extent. Out of several hundred samples analyzed by the Dominion chemist last year, only twelve were found to be adulterated.

Owen Sound, Can.

[In your first quotation you wholly misunderstood me. The quoted sentence standing by itself *might* admit of the interpretation that you have given it; but when placed in connection with the other sentences it will be seen to convey quite a different impression. "The article (namely, glucose) that is ordinarily used for purposes of adulteration is hardly fit to put into the stomach of a pig." I have reproduced the quotation, but have put in parenthesis the exact meaning I intended to convey. Your argument is all for naught.]

You still fail to furnish one iota of proof to the effect that glucose is a legitimate article of commerce. If you will show me one legitimate use to which glucose is put, outside of its use as an adulterant, I will give you a chromo. It is possible that it is used in the manufacture of liquors; if so, it should be classed along with them.—Ed.]

#### MARKETING HONEY.

The Problem of Candied Honey; the Policy of Replacing Candied Honey with Liquid, Condemned; Some Valuable Hints.

BY. J. A. BUCHANAN.

I believe I stated some time ago that I would have a short talk on this subject. It is one that is continually bobbing up. Articles of interest embracing many facts and some theory have been appearing in GLEANINGS for some time, especially the talks by Mr. R. C. Aikin. It is true, that bee-keepers who produce alfalfa, basswood, and other kinds

which soon granulate, will ever have trouble unless a way shall be discovered to prevent candying.

We have handled immense quantities of alfalfa honey, but have given it up on account of its ready disposition to candy. Mr. Aikin's suggestion to put up the honey in small cans of 1, 3, or 5 lb. sizes, and retail or wholesale in this way, letting it candy when it may, depending on the printed instructions as a means of information and education whereby the consumer may learn to liquefy his own honey, will do with only a very few people, as I tested this very plan some years ago.

Some four or five years ago I visited grocers in different towns and cities, on the hunt for bargains in honey that had been put up this way which had stuck on their hands, and, being candied, it was not wanted, but looked upon with suspicion by both grocer and buyers. I found in one store several hundred 3-lb. cans of candied white-clover honey, and bought the lot at 5 cts. per can, and the grocer was glad to get it out of the way. This honey was labeled with plain directions for restoring to the liquid form. It is surprising how few persons there are who will read instructions in the management or use of any article.

Some of the worst abuse I ever got in my life came from retailers and customers upon finding the honey I had sold to them had candied, or "gone back to sugar," as they put it, as well as firmly believed. We now handle only such grades of honey as will not candy, are or very slow to do so.

As to the matter of taking up all jars, cans, or glasses, and replacing with freshly liquefied stock, I can think of nothing more distasteful than such everlasting foolery and waste of time; not only so, but, worst of all, this relquefying will soon destroy both color and flavor. I have known several parties who once put their honey on the market in this way. I did so myself, but it's too puttering a business to keep up continuously.

In localities where the honey crop is not large, bee-keepers can find customers for all they produce, with little trouble, and at satisfactory prices; but the case is different where there are great quantities and no good home demand. In this case it appears to me it would be quite as well to wholesale and let it fall into the hands of those who make a business of handling honey by hunting up consumers. By the time this class pays freights, stands all losses, bears all expenses of traveling, taking orders, delivering, etc., he will find, these slow times, that his profits will all be taken at any ordinary bank, if not all, to defray expenses.

Just let every producer do his level best to sell in his home market all he produces, at the best price possible to obtain, going at the business with a determination to sell, and I am sure there will be no very large quantities find their way into the hands of city commission houses.

I have often bought bee-keepers' crops of honey and stepped into the towns right around them, and in a few days' work have doubled

my money on the purchase, while they all the time claimed there was no use to try any more to sell honey in "such places;" but I'll admit the fact that not all people are salesmen.

Although we sell large quantities of honey, both comb and extracted, each season, we never sell honey to dealers, but altogether to the consumer, giving them fresh honey, and so good that they will not keep it long enough to candy.

We put up no smaller packages than one dollar's worth, as it does not pay to deliver a less quantity at the close margin at which honey may be sold these times.

It has always seemed a mystery to me how it comes, that, in nearly every case, we are able to purchase honey of the same quality from commission merchants of the large cities at a less price than we can buy direct from the producer. Perhaps bee-keepers ship to cities in the hope of getting the best prices; but after waiting long and getting anxious for returns, they advise their dealers to close out at once to the best advantage, which is sure to be to any other person's advantage more than to that of the owner of the honey.

Now let every one who can find any thing like a fair home market go to work and supply this and keep it up, which plan will be found to give, in the outcome, the best and most permanent satisfaction as well as profit.

Holliday's Cove, W. Va.

[I believe I have already said—at all events I will say it now—that Mr. Buchanan has probably sold more honey, in a retail way, and has done more in the way of developing local markets, than any other bee-keeper in the United States. He annually produces large crops of honey, and not only sells his own, but sells for a good many others.

Mr. Buchanan's experience with regard to candied honey, and replacing the same with liquid, will probably not work satisfactorily with him; but Mr. Chalon Fowls, of Oberlin, O., has worked on this plan for years, and considers it profitable.

I was struck particularly with one paragraph where Mr. Buchanan says he has often bought bee-keepers' crops of honey, and sold it right around their homes, and doubled his money, while they, the bee-keepers, had all along claimed that there was no use of trying to sell honey in their markets. Granting that Mr. Buchanan is a natural salesman, and knows the art of selling, this does not explain how he should be able to double on his money, unless, at least, those bee-keepers who complain of their home markets have made no effort to develop them. Perhaps they are not read up—or at least have not read the series of valuable articles that have been running in GLEANINGS and the other bee-journals of late. Understand, I do not question Mr. B.'s right to double on his money. It is his privilege and right, if the other fellows won't post up and do something.

Mr. Buchanan calls attention to another significant fact; namely, that in nearly every case he has been able to buy honey of a given

quality from commission merchants in the large cities *cheaper* than he could buy the same honey direct from the *producer*. This is too true. It can be explained only on the ground that so much honey is sent to the cities that it gluts the markets; and the consequence is, the bee-keeper is glad to get any thing if he can only get *something*. Too often he is deceived by quotations that are above the market. Big promises for immediate returns at glittering figures allure him. Why will not bee-keepers learn to be careful? Nine-tenths of the producers know the art of *securing* honey; but I almost believe that nine-tenths of them do not know the art of *selling*. Why, we are to-day having the finest qualities of comb and extracted honey offered to us at prices that are ridiculously low. Sometimes we buy, and sometimes we do not. We very much dislike to be lugged into the "general swim" with those who are trying to buy closely, at the expense of the hard-working bee-keeper. It is too bad, but need not be if producers would not be so fast to lump their honey off in large lots for the sake of getting a "big pile" all in one lump.—ED.]

#### GOOD CROPS AND GOOD PRICES.

##### The Advantage of Selling around Home.

BY DAN WHITE.

I notice in last issue, July 15, comments about our large crop of honey. Some are afraid of a glut in the market, ruinous prices, etc. Now, if I can say a word of encouragement I will gladly do so. My this season's crop is about 7000 pounds, mostly extracted, and I expect to market every pound of it at fair prices. You know good help to work among bees is hard to find; consequently about four weeks' good hard labor by myself alone has secured this honey. I have no one to settle with for labor but myself. Now, is it good policy for me to sit down and wait for people to come and buy my honey, or put it in large packages and throw it on the market? I believe I can now well afford to do some hustling around, and sell this honey. Don't you see I shall do this myself? and when I get through, my expense account will not eat up a large share of my honey crop. I can now report one day's labor, 600 lbs. honey sold, nearly all for cash, and in the mean time I have found where I can place about 600 lbs. more just by driving around with the honey.

Let me give my price: 8 cts. per pound, in a small way; \$7.00 for 100 lbs. I have already filled and taken several orders for 100 lbs. in a family—some of them farmers too. Don't be afraid to go out among the farmers, and especially the laborers in villages and cities. I have told you before that four families out of five hardly know what honey is. Now, sir, we have lots of honey, and let's hunt these people out and tickle their palates with some good honey. We shall not only get rid of this crop, but we are making a market for future crops of honey.

I could hardly give the time to say what



little I have. I will report later how I get along. But I will add this much, and close: I have had a host of help around me picking, marketing, and looking after 8 acres of small fruit. When I get settled up, and expenses paid, I believe I shall take off my hat and give three cheers for the bees.

New London, O., July 20.

[Dan White is a "hustler;" and if you could see him once as I have, and imbibe a little of his enthusiasm—well, I think you could sell honey too. Our hustling friend asks a very pertinent question: Is it good policy for the bee-keeper to sit down and wait for people to come and buy his honey, or put it into large packages and throw it on the market? or shall he sell it himself around home, and get good prices? Just think of this a good long while, brother bee-keepers, and then ponder a moment on some of the things that Mr. Buchanan has said in the article just preceding.—Ed.]

#### DEVELOPING HOME MARKETS.

Putting out a Fine Article, and Having it Stand on its Own Merits.

BY B. F. ONDERDONK.

*Mr. Root:*—I notice an uneasiness in the minds of some of the correspondents of the various bee-journals as to what they will do with the large crop of honey in view this year. I would say to all, *make your own market.*

In 1895 I commenced with three colonies, and got a surplus of 89 finished sections, retaining imperfect ones for my own use. As my duties call me to the city every day I do all my apianian work before 7 A. M., and after 6 P. M., working as early as 4:30 and up to 10 P. M. The first case, a 12-lb. section one, I fixed up, using wider glass than usual,  $3\frac{3}{4}$  in., to make a good display, and carried it into the house, and said to my wife, "Show this to the grocer when he calls for orders."

She asked him, "Do you sell honey?"

"Well, we always have it, but there is little sale."

"Is it as fine as this?"

"My! isn't that nice? What we have looks as though the mice had gnawed it. If that is for sale I'll take it and see what can be done with it."

This was in October. He sold my entire surplus; and when that was exhausted he sold all of his old stock—an appetite was created. In 1896 my surplus of 312 lbs. was gone by January.

The other grocer with whom I also deal wouldn't touch it. "Never sold any comb honey." This summer I told him he ought to sell honey, to be up with his competitor. "Well, I'll think about it."

The first honey I took off June 22, and sent him a case with the message, "If you don't sell it I'll take it back." He has now his fourth dozen. The other man has it also on sale. I have taken off 385 sections to date. Of course, among them are some nice and

white, but only three-fourths full, hardly marketable (of course, all sections are thoroughly cleaned); and as we have a fish-peddler who sells fruits and vegetables as well, I said: "Here, you can surely sell honey."

"Oh! I don't know."

"Well, now, these you can have at 10 cents; sell them for 15 cents; or two for a quarter; these No. 1 are 13 cts.; fancy 15 cts., to the grocers."

This peddler's route covers a circuit of five miles from the village, and is run three days. He sold out his case (12 sections) each day, and had not enough to go round. He has engaged all my incomplete sections. He got 15 cts. each, and a nice profit, \$1.80.

In the spring a neighbor living a mile away came to me and asked me if I would instruct him in the care of bees, as he knew nothing about them, and had a chance to purchase eight colonies. I have informed him on all points, and he is a credit to my teaching, making a success.

Some of my friends expressed surprise at my willingness to encourage competition as they called it. I told them that a successful competitor would increase the field of demand; that honey would be introduced to hundreds of families who would not otherwise know of it; but that I felt it my duty to benefit my fellow-man, even though I might suffer loss.

Mountain View, N. J.

#### SECTION-PRESSES AND THE RIETSCHKE PRESS, AGAIN.

The Comparative Merits of the Daisy, Hubbard, and the Rietschke Combined Machine Discussed.

BY F. L. THOMPSON.

Some time ago Alois Alphonsus, of Vienna, stated that foundation could be made as thin with the Rietschke press as with a mill. He is a professional bee-keeper of good standing. That was the basis of my "assumption" of the possibility of making eight L. sheets to the pound with the press. I did not entirely believe that statement, but thought he was a little mistaken; yet it strongly indicated that foundation could be made pretty thin, for surely they can turn out 11 feet to the pound, anyhow, in Europe, on the mills there in use. At any rate, that statement, and your experience of three L. sheets to the pound, seem utterly irreconcilable. Though I have never seen a Rietschke press, what I read about it makes me lingeringly suspect that your experience with it is not identical with that of foreign bee-keepers. Did you use the honey and alcohol lubricant? The press is frequently referred to in high terms by disinterested parties in a number of foreign bee-papers which I receive. I hope to learn before long just how thin the *improved* machine makes foundation. I think it would be well to find out all about this; for until then I, for one, and no doubt others, will feel uneasy; and be tempted to send our hard-earned dollars across the ocean for something to save money with.



Yes, I did think you were favoring the supply-dealer at the expense of the bee-keeper, but supposed it was because you were under the false impression that you were favoring both. One may be mistaken in this as in other ways—in fact, more readily, for the consideration of unconscious bias comes in.

So far I am not certain that I may not have got the worst of it; but now for the next round—look out! You say you have “carefully tested” every combined section-machine sent you. What does this mean? A machine *might* be carefully tested in twenty minutes, and a verdict given. But in the case of any machine depending partly for its speed on the way it is handled, a short test is no test at all, unless its defects are quite obvious. Otherwise no machine you test is on equal terms with the Daisy. Not less than five thousand sections should be put up, and ten thousand would be better. The operator must learn to finger it as an expert does a piano. This requires time, and lots of it; but I see no other way to do. Piano-fingering is exceedingly awkward work for a long time; but, when once learned, the motions required are as elegant and effective as they formerly seemed awkward and unnatural.

I have not tested the Daisy—not because I do not want to, but because I have not time at present, and have not a suitable lamp. But I will leave it to you whether there are not some things I can say about it, as well as the Hubbard, which I have not worked either. (I have used, besides the Rauchfuss, the Parker and the Clark machines, and a treadle press called the Beeson.) My objection to all separate machines is that, in folding, certain motions are gone through with that have to be done over again when the foundation is fastened. If you could combine the Daisy and the Hubbard, wouldn't you do it? But, this idea is “theoretical.” Not so. The other day I made repeated experiments with lots of twenty sections each on my machine, some previously folded, and some not, to ascertain how much extra time the folding took when both operations were performed together. One lot, already folded, was supplied with top sheets at a rate which, if continued, would be 450 an hour. Another was folded and supplied with top sheets at the rate of 436 an hour—a very trifling difference which leaves the Hubbard out of sight, even at the rate of 500 in 15 minutes. In another case, in which both top sheets and bottom starters were used, one lot with and one without folding at the same time, *each* lot was done in  $4\frac{1}{2}$  minutes (or 266 an hour)—no difference at all. (By the way, what is the record of the Daisy in putting in both top sheets and bottom starters?) I may mention here that I made several trials of 20 sections each on the folding part alone, out of curiosity. The average was 20 in 65 seconds—a rate of 1000 in 54 minutes. An expert might equal the Hubbard. But, of course, there would be no object in folding separately. I mention this simply to show that no time is lost by the method of folding employed.

In fastening bottom starters only, in previously folded sections, I reached the rate of 490

an hour. Small starters appear to be handled a trifle easier than full sheets. When this rate, with my experience (at that time), in putting up only 5000 sections on this machine is compared with your rate of 500 an hour, and an experience of hundreds of thousands, probably, on the Daisy, I don't think there can be much doubt as to the conclusion to be drawn concerning the foundation-fastening portion of the Rauchfuss machine; and when you come to add the 15 minutes previously required to fold those 500 on the Hubbard, and then compare the total result with the fact that the combined machine adds less than *three* minutes to its separate record to accomplish the same result, it looks as though inexperience with the combined machine actually did better work than experience with the separate ones.

But I hear some one say, “Oh! if you are going to compare your *spurts* with the ordinary records of others.” To this I calmly reply, Consider the piano again. A beginner of, say, 400 hours' practice may spurt all he pleases; but he can not run a scale, nor hop around among the sixty-fourth notes, nor execute a trill, at a quarter of the rate in which an expert does it, and the latter will carry on a conversation at the same time. In other words, when speed depends on strength the inexperienced may gain by spurring, but not when it depends on dexterity. Of this I became painfully aware when, in making the “spurts,” my fingers boggled and hit the corner of the press more, it seemed, than they did before.

As to quality, I grant the excellence of the toggle-joint in saving power, but contend that sufficient power for the purpose can be saved in other ways. The Rauchfuss machine saves power in two ways; first, by a treadle, by means of which the same bodily exertion with the foot applies greater force than with the hand; second, by a lever in the machine itself. The power is at one end, the fulcrum at the other, and the pressure is applied about a third of the distance from the fulcrum to the power. If any person were inclined to criticise the resulting exertion required, he could do so without touching on the principles of the machine. It would only be necessary to lessen the distance from the fulcrum to the point of pressure. But I do not know that there would be any object in doing this. As it is, the exertion is trifling (on properly dove-tailed sections), and, what is more to the purpose, the work is perfect, so I do not think the Hubbard would be preferred on account of superiority in results.

Passing to the quality of the work done in fastening foundation, I call your attention to Mr. Hutchinson's statement that he has met with better success in fastening flat-bottom foundation by pressure than with the heated-plate machines. I assume that, among the latter, he includes the Daisy; but he does not include the Rauchfuss, as he has not tried it. Somnambulist, too, says this is his (or her) last year with the heated plate. Hence, without having used it I may infer there is some reason for thinking the work of the Daisy is not perfect; for, although neither of them

mentions it, other heated-plate machines are not common. Now, unless I am greatly mistaken, flat-bottom foundation was the kind chiefly or exclusively used when the Raufuss machine was being constructed and experimented with. At any rate, I know by my own experience with flat-bottom foundation that the machine will fasten it so it will tear sooner than peel off. This looks like superiority to the Daisy. The reason is, I suppose, the speed with which the foundation reaches the wood after leaving the heated plate. The construction of this machine is such that if, for a guess, the starter in the Daisy drops in  $\frac{1}{10}$  of a second, in the Raufuss it must drop in about  $\frac{1}{500}$  of a second. The heated wax has no time to begin cooling before it has gripped the fibers of the wood. By sliding the foot off the end of the treadle, not lifting it, the spring gets in its work like a flash, and meanwhile the fingers of *both* hands exert on the starter a downward pressure which reaches its maximum at just the proper instant, since, by practice, the action of the foot becomes automatic. This speed renders entirely unnecessary any surplus of melted wax, such as I have seen accumulated on a lamp used in the Daisy. A touch, and it is done, when the lamp is hot enough; and the hotter the better. Thus foundation is saved.

A mere inspection of the machine will convince any one that its work can not be inferior to that of the Daisy, for all the good points of the latter are retained; and, for the reasons mentioned, I don't think it much of an assumption to infer it is superior, even if I have not tried the Daisy.

I ought to add that I find it better, in folding sections with the Raufuss machine, to give a sudden *punch* to the treadle, instead of a simple pressure. By so doing it never fails to drive the locked corners as tight as they can possibly be, with but slight exertion.

If you are going to test the machine, I advise fastening the wire which connects the treadle with the lever to that one of the two holes in the treadle which is nearest the center. This allows the foot to slide off the end of the treadle when releasing it. It is only by so doing that the full play of the spring is obtained. Also be careful not to get too many fingers in the section. The forefinger and thumb of each hand are sufficient. Press the foundation *only down*, not in any other direction. The two forefingers should rest on the top edge of the foundation. When holding the section in position for folding, it is not necessary to bring the dovetails any nearer together than to bring them just inside the jaw. The machine does the rest, providing the upper and right-hand portions of the section are *pressed against the back of the machine*, not toward each other. This is one way in which the machine saves time. Those accustomed to the Daisy are very awkward with this machine at first.

Montrose, Colo., July 20.

[I am willing to admit that the Rietsche press may have achieved in Europe better results than we have been able to secure from

our press of the same make; but, taking every thing into consideration, your position is a little lame by reason of the fact that you have never tried the Rietsche yourself. But the fact is still significant that the manufacturer of the machine we had, at least, did not claim that it would make more than five and one-half sheets to the pound. Granted it could make eight on their improved machine, I do not see how it could be possible for it to compete with the foundation bought in the open market, at present prices, for the reason that I do not believe the average bee-keeper is skillful and expert enough to reach a speed that would warrant him in trying to turn out an inferior article at home, to say nothing of messing things up generally.

Granting all you say with regard to the difference between trained fingers and fingers new to the work, there still remains the fact that you have not tested, as you say, either the Daisy or the Hubbard machine. In order to form a correct estimate one should be reasonably familiar with both the combined Raufuss and the two machines that seem now about to enter the contest. As I have never tested the Raufuss I will not discuss the relative merits of the two classes of machines at this time, because a Raufuss is already on the way, and ere long I hope to be able to make a report on it. In the mean time, permit me to say that I am inclined to believe it is a good machine. Yes, I will go further and say it is possible it may do more rapid work than the two separate machines we have used. I hope it may. When it arrives I shall be interested in seeing it have a most thorough and careful test; and if it is all that you seem to think it is, we shall be very glad to enter into some sort of arrangement whereby we can supply it to our general trade. We Medinaites are always looking for something a little better than we already have; and when we find it we are glad to place it before our customers.—ED.]

#### OCcurring THOUGHTS.

BY J. W. SOUTHWOOD.

The lateral moving of the self-spacing Hoffman brood-frames when hung on the new tin rabbets is so easily and quickly done, and the frames at the same time so nicely adjusted, that they are worthy of much merit as time-savers. Just think of moving all the frames from either side, and adjusting them at the same time, compared with the manipulations of the old-style frame.

Of course, it is more work for a busy and tired editor; but I say, give us footnotes. Often, when busy, I read them first, to see if I desire to read the article. They are full of thought, broad in remembrance of like things or sayings, yet condensed and right to the point. Continue to give us footnotes.

I think sometimes we bee-keepers are too hasty in coming to conclusions, and thus mistake the exceptional for the general habit, trait, or characteristic, then hasten to give the



public our mistakes. One or two observations or experiments are not enough.

I may be wrong, but sometimes I wonder if it would be possible to have some queens and comb of *Apis dorsata* shipped over to some Southern State, the queens clipped, and introduced into some Italian colonies, and the combs, containing drone and worker cells, inserted; and, when drones are produced, endeavor to mate with Italian queens.

I know we can not all arrange our articles as well as W. Z. Hutchinson and the editor; but we can exercise care and thought. We sometimes mention things that are not interesting. That able writer, in speaking of measuring combs which the bees spaced and built as they chose, said he measured some of the combs of his father's box hives in the barn some 27 years ago. It is of no interest to know whose hives the combs were in, nor whether they were box hives or gums, nor when it was, nor where they were. The points of interest are the thickness of the combs and the distance from center to center.

The basswood bloom was not as plentiful as usual, but was sufficient to give a good supply of nectar; but the extremely hot and dry weather brought out the bloom nearly all at the same time, and almost dried the bloom as soon as out; and if bees worked on it any it was early, as I was under small trees at different times and could neither see nor hear a bee at work. White clover is abundant. It did not yield well at first, but is yielding well now.

[*Apis dorsata* could not, I think, be crossed with *Apis mellifica*, another species.—ED.]

#### NOTES BY THE WAY.

BY J. T. CALVERT.

After crossing the Rocky Mountains, so full of wonderful and enchanting scenes, their lofty peaks covered with perpetual snows, and where the pure water of the mountain streamlet, laughing and dancing on its way down over the rocks, ever increasing till it becomes a mighty stream, we come to the plains of Western Colorado, where, under the influence of irrigation, great transformations are taking place. Fruits in great abundance and variety are produced. It is estimated that there will be several hundred carloads shipped from Grand Junction this year. The honey industry is also flourishing here, and this year's crop is estimated at six carloads for shipment from this one station. This is produced from alfalfa, and is of excellent quality.

In our short stop of an hour here I hunted up The Abbey Hardy Co., commission dealers, who supply the larger portion of bee-keepers in this vicinity. They also supply fruit-men, and are large shippers of fruit and honey. From the number of young orchards which we passed, it would appear that only a beginning had been made in fruit-growing in this valley.

On arising the next morning we found our-

selves in the charming Utah Valley, still surrounded by the snow-clad hills. The neat and comfortable homes, surrounded with fruit and farm products in great abundance and variety, betokened the thrift of these people.

We stopped for two days in Salt Lake City. This is a charming city in many ways. The streets are all laid out very wide (110 feet), about twice as wide as ordinary streets. All the poles for telegraph, telephone, and electric-light wires, etc., are in the center of the street, and on either side of these the street-car tracks, leaving a very wide space for driving, and an unusually wide walk. In the gutter, between the walk and the street, on both sides of almost every street, is a beautiful stream of clear spring water from the mountains. This may be turned into the gardens by side runs across the walk, making irrigation very easy and convenient. All around the city are the snow-clad mountains rising several thousand feet. From Fort Douglas, just outside the city limits, on the foot-hills to the east, a splendid view of the city and valley beyond is had—Salt Lake itself spreading out on the western horizon 25 to 30 miles distant. The water of this lake is so heavy with salt that one can not sink in it, but will float with head and hands and feet all above water. I know this is so, for I tried it myself. The water is so very strong that one is in danger of strangling if he allows his head to get under water. No matter how weary you may be, you will find here that your feet are so light that it is difficult to get them under you again after you have allowed them to come to the surface.

While in Salt Lake I visited at the home of John H. Back, our agent handling bee-keepers' supplies at this point. From him I learned that there had been a heavy loss of bees in Utah the past winter, many having allowed their bees to starve for lack of attention. The prospect for a honey crop was good with those who had given their bees proper care and attention. The principal sources of honey here are alfalfa, and sweet clover, which grows in abundance in most of the waste places.

I was not fortunate enough to meet any other bee-keepers here, although I learned afterward that one or two had tried to find me, and failed.

The Christian Endeavorers from the East, journeying to the Golden Gate, spent Sunday here, and held what was called an inter-mountain rally. There were some 50 special trains, each bearing from 300 to 500 people, who stopped here for rest. We were royally entertained, and no doubt left behind us a lasting impression.

Leaving here early Monday morning we passed on through Ogden and across the great alkali plains of Utah and Nevada, reaching Reno on Tuesday morning. Here I spent a day visiting the bee-keepers who, in past years, had shipped us such nice alfalfa honey. I found here the prospects for a honey crop the poorest they have had in years. While they should have been taking their first and best honey from the first crop of alfalfa, the

bees were scarcely making a living, while the first crop of hay was being cut earlier than usual on account of two obnoxious weeds that were becoming a great pest, requiring the cutting of the alfalfa earlier to prevent the weeds going to seed.

I found that perhaps the most progressive bee-keeper in the vicinity of Reno was a woman, Mrs. Sherman. I spent two or three pleasant hours in her home hearing her tell her experience, which was usually one of trial, and dearly bought. I visited her shop, where she and her daughters make the necessary preparations, even to making their own foundation. She is so careful in the grading and packing of her honey that she has always been able to sell it at a good price, thus reaping the reward of her unremitting toil and careful management. I found two others of the principal bee-keepers — Mr. Ball and Mr. McCart—away from home. I hired a bicycle and went out into the country a few miles, and had a short visit with Mr. Cooper and Mr. A. C. Hash.

In this section they have rain during only two or three months in winter, and they depend upon irrigation for most of the beautiful vegetation and field crops of the valley, through which flows the Truckee River down to the arid plains, where what is left, of it sinks out of sight.

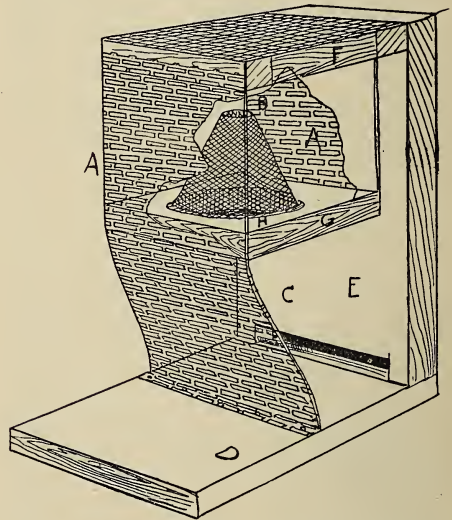
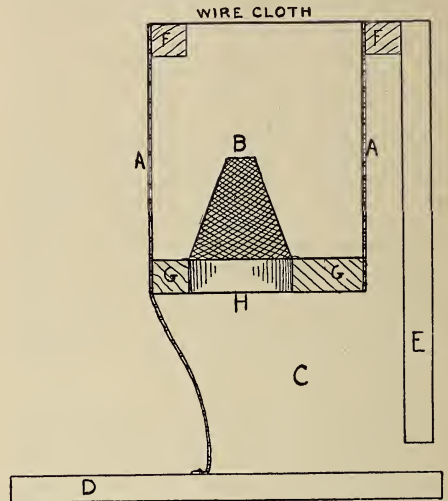
As I pass over these immense plains of barren waste, yielding nothing for mankind, and note what may be accomplished by the water stored up and distributed in sufficient quantities at the proper time, making the desert blossom as the rose, and produce all manner of fruits and vegetation for the blessing of man, and remember that, for most of this country, water falls during the year in sufficient quantities, if stored up and utilized at the right time, to make all this region productive, I think of Jesus' words to the woman at the well: "He that drinketh of the water that I shall give him shall never thirst, but they shall be in him a well of living water, springing up unto everlasting life." The fountains of God's grace are sufficient to bring joy and peace in abundance to all mankind. They only await the co-operation of man and the intelligent application of his truth to our lives—not in an avalanche once a year during the winter revival season, but the daily streams with gentle flow and subtle power, divided and subdivided till it reaches every act in the daily life of every living creature. If in the distribution of water through the irrigation-ditches any portion is omitted, the vegetation there soon withers and dies. So with any life that is not constantly supplied from the fountain of God's grace.

## IMPROVEMENT IN DRONE AND QUEEN TRAPS.

BY ADRIAN GETAZ.

In using queen-traps I have often found them too slow in their work. What I mean by this is that, before entering the cones, the drones remain too long below, trying every

hole in the zinc before they go up. The same inconvenience is found with the queen at swarming-time. During the excitement the queen will run to and fro over the zinc, fail to find the cones before the swarm is all out, and finally go back into the brood-nest.



In trying to improve the trap I find that the best way is to use a piece of wire netting instead of a tin slide to cover the trap. The light attracts the drones and queens, and to a great extent the workers also, and they go up at once. In such a construction it is necessary to have the front of the upper compartment made with bee-zinc so as to permit the workers to go out. The accompanying figure shows the details.

Knoxville, Tenn.

[Your improvement on the Alley trap, I feel sure, is a good one. Quite by accident the artist has suggested in his drawing another



er improvement; namely, allowing a large amount of zinc surface just in front of the entrance, as at C. The ordinary Alley traps have too few perforations through which the bees pass back and forth into the hive, to allow of proper ventilation, and probably for next season, at least, we shall modify the trap somewhat on the line suggested in your letter, leaving at the same time a large amount of perforated-zinc surface so that, during the height of the honey-flow, the bees may not suffer from want of sufficient ventilation. If the entrance is too contracted, or at all obstructed by perforated zinc, the heat inside of the hive is apt to be such that the super will be deserted, and the bees will be clustered out in front; and those bees that cluster outside cluster over and about the entrance so as to make the opening much smaller, and thus at the same time considerably aggravate the difficulty.—ED.]

### THE NEW UNION.

A Movement on Foot to Kidnap it; a Note of Warning.

BY DR. A. B. MASON.

*Editor Gleanings:*—I've just read Mr. Herman F. Moore's article on page 554, in regard to the pure-food laws of Illinois, and it occurs to me that the new Union is being the means of getting some of our eyes open. Like you, I presume a goodly number of honey-producers, as well as others, have been thinking that the work of the U. S. B. K. U. would be in securing pure-food legislation; but Mr. Dandant's ideas were first-class; and he, being one of the Board of Directors of the Union, I thought we might soon hear that work had begun by the Board along the lines he suggested; but here comes our old (or, rather, *young*) friend Mr. Moore, formerly of Ohio, but now an attorney in Chicago, and he gives us the *law* of Illinois on pure food, or, rather, the adulteration of pure food. It is as good a law as could be asked for, unless a pure-food commissioner would make it more valuable, and I doubt not we shall hear that the Board of Directors have begun work along the line proposed by the constitution, in looking after the adulterators of and dealers in adulterated honey.

Mr. Moore's article is very timely, and shows his interest in this work; and I hope it will be the means of starting the Union on its mission. I'm wondering if it would not be a good plan for General Manager Secor to get some one in each State in the Union to look up the law on this matter as Mr. Moore has so thoughtfully and kindly done. Perhaps some bee-keeping attorney in each State will follow Mr. Moore's example, and give us or the General Manager the law on the subject. There need be no great expense in learning just what each State has on this subject, and no very great expense in having such laws enforced, for they provide for their execution at the State's expense; but the Union can see to it that some one "starts the ball rolling."

It may be well to have some samples of suspected honey purchased and analyzed, as you suggest, and begin the good work right in "bad Chicago;" and with Mr. Moore, Dr. Peiro, Dr. Miller, Mr. York, and a goodly number of other members of the Union right on the ground, we may look for gratifying results being accomplished, and without making a very big demand on that \$3800 income of the Union, which Skylark, in one of his "flights," predicts will be "overleaped" this year.

While I think of it, Mr. Editor, isn't Skylark an active member of the Ananias family? No person by the name of *Skylark* has sent me "two dollars and fifty cents" for membership in the U. S. B. K. U. The man who sent in that "two dollars and fifty cents" has got a good straight honest name, and not a word about "Skylark"-ing in it. I might say that each bulldog that sits on the "coffers" that Skylark refers to has a collar around his neck with the name of the State he represents on it, and those bulldogs are so fed as to develop the most intense bulldog nature; and woe betide any non-union person who may attempt to interfere with the deposit each so faithfully guards.

I have not thought of your suggestions enough to say what will be the best course to pursue; but I am sure that our Board of Directors are abundantly qualified to handle the matter, and I hope they will *at once* proceed to business, and the Board may draw on my Illinois coffer to the full amount of any expense they may incur; and if there doesn't happen to be enough in that coffer I'll open up others to honor their drafts.

As I have said before, every honey-producer, every lover of honey, and every dealer in honey, ought to help on the good work by sending a dollar to General Manager Secor or the Secretary, and not be selfishly reaping the benefits of other people's investments. If only a small portion of such should respond to this suggestion I might have to enlarge those "coffers," and feed the "bulldogs" a little more heavily.

I'm sure Mr. Moore's article will cause a thrill of joy in every member and friend of the Union, and I know I shall work with renewed pleasure for the accomplishment of the objects for which it was organized, for their accomplishment seems nearer in sight.

While having some business correspondence recently with A. B. Williams & Co., of Cleveland, O., dealers in honey, I referred to our Union and its objects, and stated, as above, who ought to belong to it. The next mail brought a request for information in regard to the Union; and the next day, after getting the information, their dollar for membership in the Union lay safely in my Ohio "coffer."

Nearly every day I am receiving a membership fee, and some days several. On the 18th of last May I received 24 names and \$24 from Mr. J. Webster Johnson, of Arizona, Secretary of the Salt River Valley Bee-keepers' Association, making 24 members; and another day I received 7 names and \$7.00 from J. P. West, of Minnesota, making all members of the Union; and I presume General Manager Secor

is being made equally happy in receiving names and dollars for the Union.

Congratulations and good wishes for the "kid," and offers of more money if needed, frequently accompany remittances. One bee-keeper, in sending his membership fee, says, "I'm a poor man; but if you want more money, call on me and I'll help all I can;" and others come with offers of more money if needed. If each one whose interest is involved in the success of the Union's work would send his name and dollar there would be no lack of funds.

I got a letter from a Canadian this week that kind o' riles me. He says: "I am pleased to see that you are making every effort to have a grand convention at Buffalo, N. Y. From what I can judge you will succeed. I have every reason to believe that there will be a good attendance of Canadians as well."

Here's what makes me "bile." "I may give you a hint—I expect to see as many Canadian as United States bee-keepers at the convention; and if there are, we may vote it a Canadian instead of a United States organization. Ha, ha!"

Now, Mr. Editor, isn't that "galling"? We've licked "Johnny Bull" twice, and now some of his offspring propose to drop in on us unawares at Buffalo, and "lick" us out of our boots on our own soil. "To arms! to arms!" Turn out, Yankee bee-keepers, and meet the enemy (?) and they'll be ours. Stir up your readers Mr. Editor, let us not be vanquished.

I've already written to the *Bee-keepers' Review* to give the note of warning, and shall write the editor of the *American Bee Journal* in the same strain, and would also send to the *American Bee-keeper*, *The Progressive Bee-keeper*, *The Busy Bee*, and the *Southland Queen*, were it not too late. Oh that I had received this hint before! The Canucks have imbibed some of our Yankee vim, and they may give us a good "tussle;" but let us not get left. Transportation is cheap, so let every one who can be on hand with arms and rations for a three-days' tussle. It would be too bad to let the Canadians kidnap our healthy growing "kid."

I shall take Mrs. M. with me to take care of me, and no one but a coward will attack a woman, and the Canadians are not cowards; so I am safe; but woe betide those without women to hide behind.

[No, no; we can't afford to let the Canadians kidnap our growing kid. My better half expects to be present. Yes, bring on the women. We may need their help.—ED.]

#### BRODBECK'S "ONE THING LACKING" IN THE CONSTITUTION OF THE NEW UNION.

[After the above was in type we received the following additional matter.—ED.]

I have just received a letter from Mr. Geo. W. Brodbeck, of Los Angeles, Cal., in which he says, "If time and circumstances permit I may forward a few suggestions in connection with a revision of the constitution of the U. S. B. K. U. The one mistake made at Lincoln

was in not making the U. S. B. K. U. a distinctive national organization; for if this had taken place the old Union would have been forced to surrender and you would have enlisted the interest of several thousand bee-keepers in the United States who now stand aloof. It is an evident fact, that two like organizations can not exist; and, if I am not mistaken, unless there is a compromise between the two the B. K. U. will revise their work and follow in the line of the U. S., and the result then will be a mere question of time. I should like to see *one* good organization do all the work required; and, as a member of both, I am willing to aid, as far as lies in my power, to accomplish this purpose.

"Controversies, as a rule, act as a wedge when opposite results are desired; but a settled purpose to compromise differences ends in brotherly love. I have no desire, doctor, to pose as a critic, as my sole interest is in seeing one grand union of bee-keepers in the United States."

I don't remember that I have anywhere referred to the spirit that actuated the formation of the constitution of the U. S. B. K. U.; but I want to say that a desire to serve the interests of honey producers, consumers, and dealers, was at the bottom of the whole matter; no selfish interest happened into it. You know, and so does every other reader of your journal who has read my articles, and what I have said at conventions, that I was a firm opponent to the amalgamation of the N. B. K. U. and the N. A. B. K. A. *unless* it could be accomplished without in the least interfering with the efficient work of the National Bee-keepers' Union." I have repeated this many times, and I *know* that you and those engaged in trying to bring about the union of the two, and enlarging the scope of their usefulness to the pursuit, thought just as I did about the matter.

After a good deal of correspondence by the members of the Amalgamation Committee, and all hope of accomplishing any thing had fled, I drafted what, after some alterations, is now the Constitution of the U. S. B. K. U. My original draft was submitted to several leading bee-keepers for criticism; and after all this was done you were so well pleased with it that, without consulting any one, you had it put in type and printed, and sent me fifty copies to do with as I saw fit, and I sent about twenty of them to our best-known bee-keepers for criticism and suggestions, such as Mr. Newman, Prof. Cook, Mr. Brodbeck, Mr. Secor, Dr. Miller, Mr. Hutchinson, Hon. R. L. Taylor, R. F. Holterman, Mr. Doolittle, Mr. Elwood, and Mr. Manum. Nearly all replied. Most were satisfied with it as it was. Mr. Newman and Prof. Cook each made one suggestion, if I remember correctly.

The whole matter, with all the suggestions offered, was submitted to the Lincoln convention, and by it referred to a committee of three, all members of the National Bee-keepers' Union, to be put in shape for its adoption or rejection by the convention. The committee met in Dr. Miller's room at the hotel (although he was not a member of the com-



mittee) and went over the whole matter carefully. They then invited about fifteen other members of the convention, among whom, if my memory serves me, were Dr. Miller, Rev. E. T. Abbott; L. D. Stilson and E. Whitcomb, of Nebraska; E. Kretchnier and Hon. E. Secor, of Iowa, and A. I. Root; and I believe all sanctioned the work of the committee. I may say here that most of those invited to meet the committee were then, and are now members of the National Bee-keepers' Union, three of them members of its Advisory Board.

No material change of the constitution as it went to the hands of the committee was made by them, and none by those invited to meet with the committee. It was then submitted to the convention, and gone over and discussed and adopted section by section, only two changes being made, I believe.

Being opposed to amalgamation, except as above indicated, I took *special pains*, in drafting a constitution, to have every thing so shaped as to favor and forward the interest of the National Union, going so far as to make the officers of the old Union the Board of Directors of the U. S. B. K. U., and leaving the funds, as before, entirely in the hands of and at the disposal of those officers. I know that the aim was to make it as nearly in intent as possible to the old Union's constitution, some going so far as to suggest that it be called "National," with the expectation that the old Union would adopt the new constitution.

In the light of these facts, what more could have been done than was done? Of course, we don't know what Mr. Brodbeck means by "the one mistake made at Lincoln," nor how it could have been made more "distinctly national." Unlike Mr. Brodbeck, there are those who think the constitution is "incomplete, and full of incongruities." I myself must admit that it is incomplete, but that is owing to the effort made to make it as nearly as possible in line with the old constitution.

Perhaps "the B. K. U. will revise its work and follow in the line of the U. S." Some of us, member of the old Union, tried to have the "work revised," but failed; and the result was the organizing of the U. S. B. K. U. If the N. B. K. U. "follows in the line of the U. S., I believe it will be following a vigorous young leader.

Why didn't Mr. Brodbeck tell us how to avoid making the Lincoln mistake? Perhaps he'll tell us how to correct it at Buffalo. Those interested in the success of the U. S. B. K. U., like Mr. Brodbeck, "would like to see one good organization, . . ." and are "willing to aid as far as lies in their power to accomplish this purpose," and *have not and will not* entertain any other feeling than "brotherly love," for their sole purpose is to have "one grand union of bee-keepers in the United States," and they propose to work in that direction till that desire is accomplished.

It is proposed by several to propose changes to the constitution at Buffalo, so as to make it as complete as possible; but all proposed changes will have to be submitted to every member for their adoption or rejection, and

this can not be done at Buffalo. From my correspondence I gather that the feeling is general that the coming convention is to be a large and good one, members in California, Arkansas, Tennessee, South Carolina, Rhode Island, Massachusetts, and Vermont, and many of the States between these, signifying their intention of being present.

Sta. B, Toledo, O., Aug. 6.



#### FEEDING BACK EXTRACTED HONEY.

*Question.*—I have read somewhere that, if I were to run an apiary for extracted honey, during the harvest of white honey, and feed the same back to the bees to put into sections, said extracted honey would sell in the section form for enough more to give me a big profit. Is this a fact? If so, how and when should extracted honey be fed back in order to procure comb honey?

*Answer.*—The feeding of extracted honey in order that comb honey may be obtained is something that has been tried by very many of our best apiarists, and still remains an unsolved problem with some of those who have tried it. Some have reported success and others a failure; but, if I am correct, those who consider the thing a failure far outnumber those who consider it a success. From my experience in the matter, I should say if any one must feed extracted honey to his bees in order that comb honey may be produced, it should be fed in the spring, in order to hasten brood-rearing, thus securing multitudes of bees in time for the honey harvest; then, by putting on the sections at the right time, a large crop of comb honey may be secured, if the flowers do not fail to bloom or yield honey. My experience has also led me to think that it is better to secure the honey in the sections in the first place, rather than have it stored in combs, and then thrown out with the extractor that we and the bees may go through with much labor and stickiness to secure the same thing which we might have secured without all this trouble. The practice of feeding back is on the principle of producing two crops to get one, and no one will argue that such a course would pay in the long run. Even under the most favorable circumstances, to finish nearly completed combs of honey, I can not make it pay if I count my time as any thing. At the close of certain seasons, when I would have a large number of unfinished sections, many of which were so nearly finished that a few ounces of honey would apparently finish them, it seemed that it might pay to feed a little extracted honey to finish such; but after a careful trial of the matter, covering a period of ten or more years, I finally gave it up as a bad job, and have not fed back a pound of honey during the past six years. If any one

should wish to satisfy himself that feeding back will not pay, he can get the best results by feeding the extracted honey right at the close of the early white-honey harvest, so that the bees are kept active. It is thought best by some to take away all combs except those which have brood in them, when preparing the colony for feeding back; but if all combs are filled with sealed honey, except that which the brood occupies, there is no advantage in taking away the combs, that I can see. The extracted honey should be thinned to a consistency of raw nectar, by adding the necessary amount of warm water, thinning only the amount needed for one feeding at a time; for if the thinned honey is allowed to stand long in warm weather, it is quite liable to sour and spoil.

Then there is another item against feeding back, which is that, from some reason or other, this fed-back honey is far more likely to candy or become hard in the comb than is that put in the comb at the time it is gathered from the field. When first taken from the hive it looks very nice and attractive; but when cool weather comes on in the fall it assumes a dull, unattractive appearance, thus showing that the honey has hardened in the cells; while comb honey produced in the ordinary way is still liquid, and will keep so for from one to three months after the fed-back article has become almost unsalable.

#### COMBS OF HONEY FOR NEXT SEASON.

*Question.*—I have on my hives about 200 combs, very full of honey, which I wish to use for next year's increase. I am at a loss to know what to do, so ask if it would be advisable to throw the honey out with the extractor and use the empty combs, or would it be best to use the full combs of honey? I expect to make my increase by natural swarming.

*Answer.*—If extracted honey brings a good price in your market, and the honey in the 200 combs is of good quality, then my advice would be to extract the honey and sell it; for the old saying, "A bird in hand is worth two in the bush," is generally correct. If, on the other hand, extracted honey drags heavily, at a price hardly above the cost of production, or the honey in the combs is of a quality not fit for market, then I would store the combs of honey away till spring (allowing the bees to protect them till there was no danger of damage from the larvæ of the wax moth), when I would use these combs for building up colonies in the spring, by exchanging them with the colonies for combs that they might have which were empty, or nearly so. In this way you will get this honey converted into brood, which brood, when hatched into bees, will store for you large quantities of honey. If the colonies in the spring had no need for this honey, then I would use the combs of honey something as you propose, hiving new swarms on them. If the combs are only from one-third to one-half full of honey, then you may secure the best results by hiving your swarms on the full number of frames and putting the sections on at the time of hiving. But if completely full from bottom to top, it will be bet-

ter to use only from four to six combs to the hive when hiving the swarms; for, if given a full hive of full combs of honey, the bees may not carry much of the honey to the sections, as they generally will do with the whole where only a few are used. If the bees do not immediately start to carrying the honey from these full combs, the result will be little or no honey in the sections, and little brood and few bees in the hive in the fall. But should the honey in the 200 combs be of inferior quality or of dark color, or both, then the only thing to do with it is to extract, or use it for spring feeding; for if such inferior honey is given at swarming time, more or less of it will find its way into the sections, thus injuring the sale of the honey, and giving yourself a bad reputation.



#### COMMISSION HOUSES; THE ADVANTAGE OF CO-OPERATION.

The clipping inclosed is from the *Denver Field and Farm*. It does not speak directly upon the subject of bees, but I think it would be a good thing for bee-keepers to take example, as they have battles to fight in marketing their produce, similar to those of the farmer.

O. W. STEWART.

Las Cruces, N. M., July 26.

#### CO-OPERATIVE MARKETING OF CROPS.

When a crop is produced, but half of the battle against all the evils of trade is won; and unless the farmer finds a good market his labor is lost, and the complaint is made that the farm does not pay. There are many leak-holes between the harvest and the market, by which the profits escape through carelessness; but the most important point, requiring constant vigilance, is the fluctuating scale of supply and demand. Many times the western farmer and stockraiser loses his entire shipment of potatoes or sheep, and frequently receives a bill for freight, with the stereotyped "please remit" stamped upon the paper.

There is no safety in relying upon the middle-men or agents of commission houses, because they give no guarantee of returns except such as the market assures on day of sale. The local merchants are not always justified in paying the value of produce, even in goods, for the reasons that they have not the capital to invest nor facilities for watching the market. Direct shipments can not be made to the market centers except by train or carload lots, and then experienced dealers must accompany the produce in order to realize the full benefits of all that the market returns. Individual marketing has always proven disastrous to the general farmer because of lack of business tact and the small lots of produce he has to offer.

The only solution of the question of realizing all there is in the products of the farm lies in the proper practice of co-operative marketing. The Utah Mormons have constructed irrigation-ditches, built up over three hundred towns, and conquered vast areas of desert by co-operative exertions, fully demonstrating the fact that the principle is correct. In citing these facts Joel Shoemaker asks: Why not adopt the methods used in selling as well as in growing produce? Twenty farmers could band together and practically control the community. Five of the best qualified men acting as a board of directors could employ one of their own number as a manager, and



transact the business with profit to the entire community.

This plan has worked admirably and profitably in several instances under our personal observation, and the efforts of those enterprising fruit-growers at Montrose, Delta, and Grand Junction, in organizing local market associations, seems a very commendable movement. If it does not succeed as fully as some may hope for the first season or so it is a step in the right direction, and must eventually lead to a better condition all along the line. There is much to be learned in this as in other things; and after all we of the new West need a good deal of schooling in most of our undertakings.

#### A PROTEST; APIS DORSATA.

*Mr. Root*:—I can heartily indorse your views regarding the importing of *Apis dorsata*, page 488, and hereby enter my protest against the use of public funds for its importation. If they are of any great value it is surely a "good" personal investment for some of their advocates. From what reliable people in their native home say of them they are too much like wild geese to be of any value to bee-keepers in this country; but, instead, I think they would prove a curse, even if they could withstand our climates, which I very much doubt. I am quite sure that we already have too many varieties of bees in this country, for our own good, and surely more "names" than "varieties." Every thing considered in the make-up of the little bee, I don't believe there is a bee on the face of the earth to-day that is superior to the pure and simple three-banded Italians, and their equals are very scarce, judging from a "personal" standpoint, and information gleaned throughout the United States.

I have said before that I have had experience that I have never seen in print, in the early mating of a queen and a vast number of queen-cells on one comb; and last week I found something that seems as unusual to me, and I have never heard of the like, nor seen it in print.

#### WORKERS REARED IN WORKER-CELLS.

When I am extracting I make it a rule, after taking the combs from the extractor, to take my old uncapping-knife and shave the heads off from all drones found in the upper stories (I use no queen-excluders); and in doing this I found one comb full of what appeared to be drones, but noticed that the caps were not quite so prominent as usual; and when I severed the caps I found, instead of drones, perfect workers nearly ready to hatch; notwithstanding the cells were regular old-style and full-sized drone-cells, the little fellows really looked lost in them. Have you or any of your readers ever had an experience of this kind? It seems to me that it proves one thing positively; and that is, that the queen governs the egg-production by her own free will, and that the shape and size of the cell have nothing to do with it, as has been claimed by some writers in the past.

I am of the opinion that our basswood-honey flow is going to be very light here this season, as it is nearly all open now, and bees are not doing much, I think on account of the extremely hot weather for the past week.

Hillsboro, Wis., July 12. ELIAS FOX.

#### HONEY-FLOW NOT EXTRAORDINARY IN WISCONSIN.

In answer to Dr. Miller, page 477, and Harry Lathrop, page 528, I will say that Northern Wisconsin will not glut the market unless on fall blossoms. Bees are in about the condition they were May 20, except excessive swarming since July 8. Returned last night from an investigating-trip in the direction my bees all want to go, and have 50 colonies, new swarms, ready to start at sundown for an out-apiary 24 miles north of Chippewa Falls, Wis.

I find here willow-herb, goldenrod, frost-flowers, etc., covering the ground for miles where the forest-fires burned in 1895 and '96.

E. A. CLEAVES.

Eagle Point, Wis., July 20.

#### WHAT IS THE MATTER WITH THE WHITE CLOVER THIS YEAR?

My bees seem to be working very busily this season, but I don't know what they work on. I haven't seen a bee on a white-clover blossom this season. We have no timber within a mile, and not much within three miles, except a few artificial groves of cottonwood, maple, and willow. There is plenty of white clover.

SAMUEL CLOUGH.

Ellarton, Ia.

[This report seems to be an exception to the general run. All the rest say that the clover this year is all right.—ED.]

#### GRANULATION OF ALFALFA.

I am much interested in the discussion as to alfalfa honey granulating. My experience has been that it does not granulate here unless it be in the brood-chamber. I have kept alfalfa honey in 1-lb. sections for a year, and no signs of granulation; but last spring I found it badly granulated in hive (stores that bees had carried over winter).

We are just in the midst of our alfalfa honey-flow. The first crop of alfalfa did not produce much honey; but it is coming in very fast now, and I am afraid my bees will get the swarming-fever. The bees here are all run for comb honey — no extracting yet. I think the home market will take care of the surplus.

Alma, Neb., July 21.

T. L. PORTER.

There is an abundance of white clover here, and we are having a slow but steady and lasting flow. From 7 hives and a nucleus with which I began operations this spring, I have taken 238 lbs. of marketable honey in sections, with about 50 lbs. more ready to come off, and no diminution of the flow as yet.

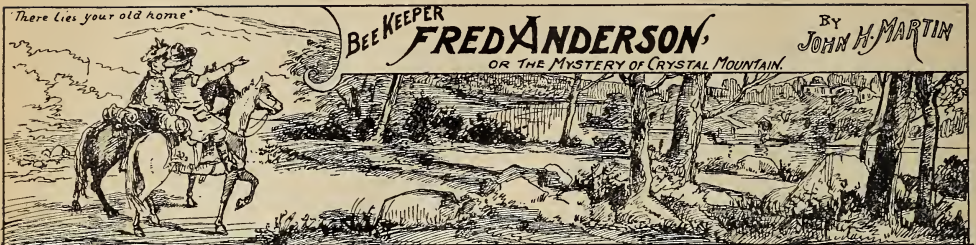
Ben Avon, Pa., July 9.

H. P. JOSLIN.

I have been worked up to the highest notch myself, working every day at the railroad shop, and working with the bees nights and mornings. I have taken already 1400 sections of white-clover honey from 12 hives, and more to come.

W. L. RICHMOND.

Lexington, Ky., July 11.



**F**RED and Alfaretta halted their ponies near the corral; and while Gimp cared for them they approached the house. The door was a trifle ajar. Fred knocked. There was a stir of chairs within, and hastening steps. The door opened, and Mrs. Buell's troubled face appeared.

"Fred Anderson!" she exclaimed, her face aglow. "Fred Anderson! Fred Anderson! Oh! where is my girl, my Alfaretta?"

"Right here, Mrs. Buell; allow me to introduce her," and Alfaretta stepped within the house.

"Dear, dear mamma!"

"Dear child!" and mother and daughter were clasped in a long embrace. "My own Alfaretta again, and still not my own, not my own."

"Why, yes, dear mamma. Why do you say so? your own, and well again; and papa—where is dear papa?"

Fred caught Mrs. Buell's eye, and made an energetic dumb motion to her to keep quiet. She appeared much surprised, and abruptly asked, "Where is Dr. Hayden?"

Fred explained the doctor's queer departure, and took occasion to whisper to her, while from the veranda she was showing him where to find Prof. Buell, to say nothing about Alfaretta's parentage.

Fred hastened toward the levee where the professor was at work; but he had not gone far when he met his old friend.

"Fred Anderson, as I live," shouted he. "I had a strong feeling that something good was going to happen, and I hastened to the house. Dr. Hayden, of course, is with you and Alfaretta?"

"Alfaretta is at the house, and sane," said Fred.

"Sane? sane?" repeated Prof. Buell. "Yes, it is possible, and true if you say so, Fred; let us hasten. But, about Dr. Hayden—where is he?"

Then Fred explained to him the sudden departure in the night, and the motive.

"Sure, sure," replied Prof. Buell; "the same self-sacrificing man I knew years ago. I should have been so glad to meet him again. But I believe I shall tell Alfaretta all about her parentage."

"No, I would not," said Fred; "it is the doctor's request that you should not. It

might cause much pain to Alfaretta, with no good result."

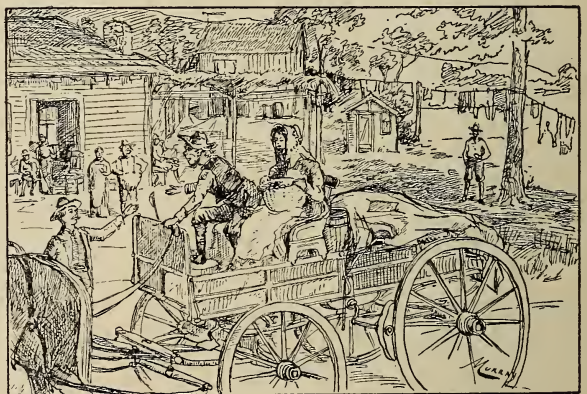
The professor's greeting was less effusive than Mrs. Buell's, but not the less hearty and loving.

"Dear Alfaretta! and yourself again! How great the blessings showered upon us! In this hour of our joy let us remember the Giver of these blessings, the healer of the sick, the one who brings great joy in the place of trouble."

The afternoon and evening were hardly long enough for the rehearsal of the experiences of the past year. Prof. Buell said he would have continued his search for Alfaretta again; but upon his return home he found a letter from Dr. Hayden, saying that Alfaretta would be cared for and returned in due time. This led him to await further developments, and now the sequel showed that Alfaretta's hejira the year before was a providential occurrence. The earthquake was a theme of constant recurrence in conversation, and Fred now learned of its extent. Sacramento had been thoroughly shaken, and the town of Williams had been so severely shaken that several houses were demolished. It was the most severe earthquake felt for years on the Pacific coast.

That evening Fred presented to the parents his claims for the hand of Alfaretta.

"It seems," said Mrs. Buell, "that your lives have run together ever since Alfaretta fished you from the river; and, Fred, as you have been instrumental in bringing her to us



well again, we shall let you two decide your own destiny."

"That is what you meant, mamma," said Alfaretta, "when you said I was not your own."



"I suppose so," said Mrs. Buell, evasively; "you know I was so overjoyed, Alfaretta, that I hardly knew what to say. Don't refer to my foolish words again, dear."

The next day Fred desired to visit the Ghering ranch, and Gimp was impatient to see his mother "an' the kids," so the party that rowed up the river consisted of the whole Buell family.

At the Ghering ranch there was great rejoicing again. Fred could hardly believe that Mrs. Ghering was formerly Mrs. Dawson, so great had been the change. He made particular inquiries for Matt Hogan; and while they were talking about him, who should appear

"Me ould friend, it's a heaven-sint idea," said Matt; "and is it Alfaretta that would make yer home comfortable loike for yees?"

It happened that day, that, after Mr. Ghering had shown all of the improvements he had made upon his ranch, the Dawson ranch was discussed.

"Wall, I 'spose the boys might work it arter a while," said Mrs. Ghering; "but perhaps it's better tu sell it than tu see it go tu rack. But, Fred Anderson, it ain't every one I'd sell tu; but seein' it's you that'll occupy it I'll sell, an' trust tu suthin' tu turn up fur the boys. They seem ter like fishin' better'n ranchin', any way."



but that worthy himself, driving a mule team to a farm wagon, and a comely Irish maid by his side?

Biddy Maloney had been caring for an aged father for many years. She had been a faithful daughter; and when her charge was released by death she hastened to join her lover here in California, and was proving as exemplary a wife as she had been a daughter. Matt had improved his neat ranch, a few miles from the river, and his main source of revenue was from a well-kept apiary.

"It is meself that can projuce the foine honey, Fred. I'd loike yees to settle down here now, and become a compaterter."

"Well, Matt, what do you think of the plan of my buying the Dawson location?"

"You know, Mrs. Ghering," said Fred, "that I will help your boys all I can, and shall want Gimp right along. We will rejuvenate the old place."

"That's jest my idea," said Mrs. Ghering, and the bargain was closed.

Fred was very happy for a few weeks in setting things to rights on the old Dawson place; and one of the first improvements was the purchase of a dozen colonies of bees of Matt Hogan, as a start for a large apiary.

"Sure," said Matt, "it will be a pleasure to have a neighbor baa-kaaper to talk to."

"Yes, Matt, there's nothing like being fraternal; and now if we had some of those Crystal Mountain queens I have told you about, what wonders we could accomplish!

But," said Fred, sadly, "not even this place will ever equal the bee-keeping paradise that was in the beautiful valley."

There was a quiet wedding at the Buell residence one day; and, after a feast of good things, a boat gaily decked with flowers and streamers carried the bride and groom to their new home. A few weeks after the marriage a letter arrived, addressed to Alfaretta. It was postmarked "City of Mexico;" and upon opening it there was found a card inscribed, "Wedding-present from Uncle Ralph." With the card was a draft for \$5000.

"Dear Uncle Ralph!" said Alfaretta; "and what a generous gift! and what a strange man! I never could really understand him."

Fred thought that he might enlighten her; but, no—the secret of her parentage must be kept.

Fred devoted much of his ranch to fruit; and between that and the increase of his apiary he gave employment to several men. Gimp Dawson became so expert with the bees that he was given entire charge of the apiary during a portion of the year. The little church not far away called the people together every Sunday. Fred and Alfaretta became prominent factors again in the exercises, and were always at their posts of duty. Mr. Buell continued to minister to the spiritual needs of the people, and the little church was known as the "Goodwill Union Church."

Fred Anderson, in all of his past losses and disappointments, looked beyond the clouds to the silver lining beyond; and now when the clouds had rolled away, and he was living in the sunshine of prosperity and a happy home he did not forget the source whence all blessings come; and, having a fellow-sympathy for those in trouble, he ever held out the helping hand to them. The home that was now builded here was in marked contrast to the former unhappy Dawson home.

As the seasons progress, there is the seed time and harvest; there is the gathering of the fruit and the grain and the honey; and so, too, in progress of time, there is a wail of an infant beneath the roof.

Mrs. Ghering comes down to congratulate the happy parents. "I s'pose, Mr. Anderson," said she, "that's what you meant when you said you'd rejuvenileate the old place; an' what'r ye goin' to name the boy?"

"Ralph Hayden Anderson," said Alfaretta.

"What a purty name, to be sure!" replied Mrs. Ghering; "may long life and joy rest on all of you."

The tourist passing up the river never fails to notice the neat rose-covered cottage and its well-kept grounds. The Anderson place is one of the beauty spots of the Upper Sacramento; and should he pass in the evening, a child may be seen tumbling on the lawn, while on the vine-covered veranda the happy parents, with guitar and voice, wake the echoes across the river with many familiar songs.

When about to close their evening exercise Fred will commence to thrum a well-known prelude. Alfaretta smiles toward him, and with both sad and pleasant memories of the past she sings that old song:

The night is stormy and dark,  
My lover is on the sea;  
Let me to the night winds hark,  
And hear what they say to me.

THE END.



FROM the best information I can get, gleaned from a good many letters, basswood has been generally a failure throughout the country, although in some sections it has been unusually good. A wet cool spring, very favorable for clover and grasses, was "a little too much of a good thing" for basswoods.

I WOULD call special attention to a valuable article by J. A. Buchanan, in another column. He has given us a little food for thought. It should not be true that honey can be bought at a commission house cheaper than it can be from the producer; neither ought it to be true that many bee-keepers make no effort to develop their own home market.

IN our last issue I confessed that I had changed my mind on the subject of clipping queens' wings. Mr. E. U. Parshall, of Cooperstown, N. Y., the old tramping-ground of J. Fenimore Cooper, writes: "I think you will enjoy bees better since you changed your mind. I could not keep mine where I do did I not clip my queens."

Mr. Parshall also writes that basswood has been a failure, and that it was his opinion that a good many supplies would be left over.

IN the July *Review*, Mr. E. E. Hasty said that he believed friend Hutchinson needed less alteration to make him a model bee-editor than any other editor we have. Bro. York, of the *American Bee Journal*, in commenting on this, says: "Well, Editor Root (E. R.), that settles it so far as you are concerned. You might as well stop *trying* to be a 'model editor.' Need too much alteration." I have been puzzling my head to know whether Bro. York was trying to lit me or to hit the other fellows over my head. Let it fly. Seriously, I've only tried to be myself.

I OMITTED to mention in our last issue that Mr. W. A. Selser, the branch manager at our Philadelphia office, 10 Vine St., had for his object, in his recent visit to the West, the securing control of a number of apiaries that produce strictly pure white-clover honey. His plan of operation among the bee-keepers, I think, is a very admirable one. While he represents us at Philadelphia the honey business is his own venture.

I remember of once asking him a question regarding the matter of buying honey on commission. Said he, "I can not answer. I al-



ways pay cash. I always feel sorry for the poor bee-keeper who sells his honey on commission." Mr. Selser has a warm heart.

A BEE-KEEPER, Mr. Robert Ayers, of Woodley, Fla., with whom A. I. R. once stopped, was stung in the back of the neck. The sting or stings caused a sore, and blood poisoning set in, resulting, we regret to say, in his death. If we were to moralize on this we should hardly be justified in concluding that the stings in this case resulted in death. Possibly a slight breaking in the skin at the same point would have caused the same result, for blood poisoning does sometimes set in, even from slight abrasions of the skin.

THE prospect is good for a fall flow of honey this year—at least around these parts. Frequent rains have made every thing grow luxuriantly. Sweet clover has grown so thriftily that around here at least it has almost all gone to seed; but the bees have worked on it busily for weeks. Honey has been coming in a little every day—just enough to keep down robbing and to keep the bees good-natured. The season has, therefore, been very favorable for queen-rearing. The asters and other fall flora are now just coming into bloom. Truly, great is the year 1897 for honey.

I FORGOT to mention in our last issue that our new type for the journal gives us about 12½ per cent more reading-matter than we had with our old type—that is, a gain of that much on the contributed matter and editorials, which were "leaded." On answers to correspondents, travels, and Our Homes, and all matter that was set with close lines, or "solid," as the printers term it, the reader loses about 5 per cent. But the total gain, on any estimate, is nearly 9 per cent over what we were giving our readers, taking the journal all through; and at the same time we are giving them a slightly larger letter than heretofore, which, our foreman says, he "specs" will be appreciated by the older readers.

#### THE ROOT COMPANY EMPLOYEES' PICNIC AT EUCLID BEACH PARK.

OUR employees this season have had an unusually long and heavy run. The force has been divided into day and night gangs, each of 11 hours' run. We have been so busy that we have had to run during Decoration day and the Fourth of July full blast. Working on holidays rather "goes against the grain" of working-people, and I do not blame them; but we had orders to fill, and honest obligations to meet.

Now that we are over the busy rush, the men have planned a big picnic on the 13th, to Euclid Beach Park, on the shore of Lake Erie, near Cleveland, about 40 miles from Medina. This involves a run of about 30 miles on the cars and 10 by boat. I wish all our readers might be present with us and enjoy the picnic with our busy workers of the Home of the Honey-bees.

We have had, during our heavy run of busi-

ness, about 180 employees. If these people take along their families, their "best girls," and their "best fellows," we may have a shop picnic aggregating some 400 or 500. On that day our whole plant will be shut up, office and all, as tight as a box, with only a watchman and perhaps a clerk to take care of telegrams and urgent business.

#### THE '97 HOFFMAN FRAMES.

THE new end-spacing Hoffman frame met with an immediate and hearty reception; and, moreover, it seems to have been just what bee-keepers were looking for. Mr. Nysewander says his trade has been greatly pleased with them. There are only two staples used to a frame; and yet our records show that we have this season bought about a ton of them. There are 800 staples to the pound, or enough to make 400 frames; 2000 times 400 makes exactly 800,000. If this does not mean that the new end-spacing Hoffman frame is popular, I do not know what does.

I have experimented with and tested a good many kinds of frames, including quite a variety of closed ends; but I do not know of any thing that begins to suit me anywhere near as well as the new-style Hoffman. It can be handled twice or nearly three times as rapidly as the old-style unspaced Langstroth frames; and in these days of low prices on honey it means that we must make short cuts. Our '96 style of Hoffman was a good frame; but the '97 pattern is far ahead of it.

#### SMOKER FUEL; DRIED TWIGS AND PLANER-SHAVINGS.

FOR years we have been using and recommending planer-shavings for smoker fuel. For a longer period of time Mr. Bingham has recommended stovewood split up into short lengths. Mr. Hutchinson, in a recent number of his journal, says it makes good fuel, but it burns out the smoker-cup too fast, and rather recommends planer-shavings, or fuel of that sort. At our basswood yard, having gotten nearly out of the excelsior sawdust (a fuel that is something like planer-shavings in its results) I made an attempt to piece out the fuel by breaking up, into lengths of four or five-inches, dead limbs or twigs from the basswood-trees. A little excelsior fuel was lighted, and the cup filled up with broken twigs. It was very evident that, while the smoke was not as dense, it was much more lasting, and, except with the very crosest colonies, it gave very satisfactory results; and I am inclined now to believe that a combination of planer-shavings and soft dry wood would be more satisfactory, generally, than either alone.

#### SECOND CROP OF WHITE CLOVER.

WE can hardly say that the honey season is closed in this vicinity, and reports coming in would seem to indicate a like condition in other localities. There seems to be around here, at least, what we might call a second crop of white clover. This is particularly noticeable in the fields from which grass has been cut for

hay. The frequent rains have made sweet clover do better than usual, and have caused red clover (or peavine) to put forth its best efforts in honey secretion. While the bees have not made much of an attempt to store surplus since about the middle of July, they have held their own and a little more. It begins to look now as if we should not have to use extracting-combs containing sealed honey that has been set aside for wintering purposes. If the fall flow shall amount to any thing, very little feeding will be necessary. All of this, if general, looks toward prosperity for the bee-keeper. During a number of the previous seasons, the clovers (especially the white) have been killed out root and branch by the drouth. This year, clovers of every description are well rooted, and we may well hope, at least, for a good clover crop next year.

#### BIG COLONIES, AGAIN.

I HAVE said a good deal in our late issues in regard to the value of powerful colonies; and, as I have said before, I reiterate; I expect to say a good deal more about it. It is one of those things that will bear repetition; for I believe it is going to take a good deal of pounding to get the fact thoroughly into the heads of bee-keepers. Well, here goes for round No.—let's see—somewhere about seven or eight—call it eight—for I am sure I have harped on this question at least eight times.

I have noticed that a two-story eight-frame Langstroth colony, run for extracted, is just the sort of colony we need for producing comb honey. Take off the upper story with all its extracting-combs, that the bees have begun storing in, and place in its stead one super containing full sheets of foundation, and, my! how the bees go to work! If the colony is very populous it may be wise to put on two supers. I am not sure, but I am inclined to believe that a good way to start bees to storing honey in supers is to give them extracting-combs; and if the season is a good one, take the super away and give them supers prepared for comb honey. But the plan won't work a little bit unless the hive is fairly "biling" over with bees. The super that has been removed may be given to an extracting-colony to complete.

#### JOSEPH NYSEWANDER.

WE have with us to-day Mr. Joseph Nysewander, of Des Moines, Iowa, who is almost too well known to need any introduction here. Originally he was an obscure bee-keeper in New Carlisle, Ohio.

I remember very distinctly of our receiving a letter from Mr. Nysewander, at that point, offering his services as stenographer and typewriter operator, adding that he was using a caligraph. As we had no stenographer at that time he was engaged, and worked for us a time. He finally left us, and struck out for himself, buying supplies and doing some manufacturing. He shortly discontinued manufacturing, as he early discovered that the large factories could not only make supplies for him cheaper, but better goods as well.

Soon after, we began sending him supplies by the carload, for I believe he was one of the very first who bought goods of us in a wholesale way, and he has ever since been getting his stuff by the carload. During the past year he has already purchased of us *thirteen* carloads of goods, besides numerous small shipments.

He is a young hustling business man; and the rapid strides that he has made in the bee-supply line is no small credit to his enterprise and pluck. He is now on his return trip to Des Moines, having been to visit his father, who is very sick, and who even now is not out of danger.

#### A TWELVE-MILLION-DOLLAR GLUCOSE TRUST AND ITS SIGNIFICANCE.

IN our issue for July 1st I stated that it had been reported that the glucose-factories of the United States had formed a trust aggregating two millions of dollars, and added that I hoped this trust would put the price on the stuff up so high that it will not pay to use it in honey. Another item now appears in the daily press, to the effect that another glucose combine has been formed, aggregating something like *twelve millions!* If this is true, it goes to show that there must be an enormous demand for an article that is used, if I am correct, entirely for the purposes of adulteration.

By the way, it was somewhat of a query in my mind *why* this particular trust should be formed at *this particular time*. Then it occurred to me that it might be the tariff. In looking over the Dingley act I find glucose has a tariff of 1½ cts. per lb., the old rate being 15 per cent ad valorem. The new duty is heavy enough to shut out foreign competition; and now an enormous trust has been formed, it ought to be possible for it to run the price up to where I hope it won't pay to use it in honey. Let it go up. Honey has been coming down in price; and if it is true that glucose will be going up, all the better for the bee-keepers. It is when honey goes *up* and glucose *down* that the adulteration of honey is on the increase.

It is also reported that injunction proceedings will be begun against the formation of this big trust, under the anti-trust law. I don't know, but somehow I *hope* the injunction will be dissolved, and that the trust will shove the price up.

#### REPORTS IN REGARD TO DRAWN FOUNDATION.

VERY unfortunately the new dies were completed too late to get samples all over the country in time for the honey-flow. In the great majority of instances the honey-flow was either waning or had stopped at the time the drawn foundation was received, and the results were, therefore, somewhat negative in some instances. A lot we sent to Mr. F. A. Salisbury reached him just about the time the honey season was stopping. After putting the drawn foundation and full sheets of ordinary foundation in the same super on the hive, he wrote us, July 17, "Honey for the last few days has not been brought in as a short time before." . . . "The founda-



tion is drawn out about  $\frac{1}{8}$  inch; and the drawn foundation is fastened all around by the bees, and slightly bulged." Again, on the 20th of July, he writes: "I looked at the foundation and drawn foundation, and found both in about the same condition as on the 17th. It looks as though our honey season were at a close."

In the mean time we had written to Mr. George E. Hilton, knowing that willow-herb would follow later than clover, and asking him if he would test the drawn foundation. He immediately replied that he could, but asked us to send three supers, each containing half drawn foundation and half full sheets, to Mr. Robert, at Woodville, Mich. The supers were sent; and under date of Aug. 5th Mr. Robert writes: "At noon to-day the common foundation had cells fully as deep as the drawn, and much whiter and more uniform in appearance. Honey is not coming in very fast, and work in sections goes on very slowly."

This test so far would seem to be rather against the new article; but one swallow does not make a summer.

Mr. D. N. Ritchie, of Black Lick, O., who, I think, is speaking of the new drawn foundation, writes, Aug. 6th: "We took off the box containing the new-process foundation, and I must say it excels the natural—no fishbone, and *better to eat*." The fact that Mr. Ritchie compares the new process with the natural, and speaks of the "no fishbone," leads me to believe he was referring to the new drawn foundation.

Mr. B. F. Onderdonk, of Mountain View, N. J., had previously written us very favorably in regard to the new drawn foundation. In a later letter he writes:

The experimental super was taken off last evening. July 1st it was placed on a strong colony, and this, as I explained before, was near the end of the honey-flow, as the drouth had set in, lasting from the 20th of June till the 13th of July, without a drop of rain. July 10th I examined and found the new deep-cell foundation, and natural starters, fully drawn and honey stored; Dadant's full sheets half drawn; Van Deusen not touched.

It will be seen from this that the drawn foundation fully equals the natural comb, and that both were ahead of ordinary foundation. Assuming that Dadant's was equal to the best of ordinary foundation, here clearly is an instance where drawn foundation and natural comb were decidedly ahead; but it should be stated that the test was more severe because Mr. Onderdonk used narrow starters of drawn foundation—one at the top and one at the bottom. These in the above test were placed over against *full sheets* of ordinary foundation.

Mr. Onderdonk states further on that the space between the two starters, top and bottom, of the drawn foundation, was filled in with natural drone comb, and therefore the appearance of the comb honey from the full sheets of foundation was better because it was all worker; but, of course, if Mr. Onderdonk had had the full sheets of drawn that we are *now* making, the appearance would have been just as good, and the result decidedly in favor of the new product.

We also sent some samples of the new drawn

foundation to Dr. A. B. Mason. At the time of sending I told him that I knew he would give them a very fair and impartial test; and that if the thing did not pan out well I knew he would be prompt and fearless enough to say so, for he is one of those chaps who, if the other fellow does not like what he has to say—well, he does not worry much about it. He has tested the new foundation, and here is what he says:

The ten samples of drawn foundation (or whatever you call it) you sent me for trial came duly to hand. Eight of the pieces,  $3\frac{1}{4}$  by  $3\frac{1}{4}$  inches square, were put in two shallow super frames, four in each; and as the four didn't fill the frames to their full length a piece of newly built comb of about the same thickness as the drawn foundation was put in to fill it. In five days all was filled with honey, and nicely sealed over.

Having some company to dinner the next day after I had removed the honey from the hive, I thought it would be a good time to test it. One of the company I have known as a great lover and consumer of honey, eating it at nearly every meal for years.

Both kinds, the natural comb made by the bees, and the drawn foundation, were tested, and some said the drawn foundation was the nicer, but *none* thought the natural comb was any nicer, or less "gobby" than that from the drawn foundation; and the great honey-eater above mentioned thought the comb from the drawn foundation was the nicer, and preferred it to the other. For my own part I could not possibly make myself see any difference, except near the edges, and there our samples of natural comb were heavier than that from the drawn foundation.

A. B. MASON.

Station B, Toledo, O., Aug. 6.

The doctor's experience is more in line with our own; and it does not seem to me that there can be any question about the eating-quality of the drawn-foundation comb honey.

I will be frank about it and state that, in my opinion, there are times when drawn foundation may not show any particular advantage over ordinary foundation; but I am just as sure that, in a majority of instances, it will prove superior, as I am sure it is an advantage to use full sheets of common foundation instead of narrow starters of the same article.

Before any opposition came up at all, it was universally admitted last year that it would be a great advantage to use natural-comb starters in supers for the purpose of starting the bees to work in the supers. It was, however, admitted that, after the bees got once started, they might work just as well on foundation as on the natural comb. Mr. B. Taylor, a year or so before he died, called attention to the great value of drawn combs, and many another one fully indorsed it; and all the tests so far with the natural comb and the drawn foundation, both of the same depth, seem to show equal results. So we may assume that there will be a big demand for drawn foundation, even though we admit that there are times when foundation will give as good results.

You will see that I have endeavored in the above to state the facts fairly. I have not tried to bolster up drawn foundation any more than it deserves.

DON'T forget the big convention that takes place from the 24th to the 26th at Caton Hall, Buffalo. A. I. R., Mrs. E. R. Root, Leland, and myself expect to be present. See convention notes for rates. After attending the convention I expect to tour eastward among bee-keepers, part of the way on my wheel.



#### ON THE WHEEL AMONG THE POTATO-GROWERS.

On the next to the last day of July I started off to visit a relative about thirty miles away. Our boy Huber, fourteen years old, rather thought he could keep up with me on the wheel, and so he proposed to go along. When about half a mile from home I stopped to see my mother, who is living with my youngest sister; and finally two of my sister's children, aged respectively thirteen and sixteen, decided to make two of the party provided I would go slowly and rest often. Come to think of it, I guess it was the mother who enjoined the above conditions in case they went along with Uncle Amos. Neither of the girls had ridden a wheel more than two months; but they put off in fine spirits, notwithstanding the warm July weather.

When about ten miles from home I proposed a little "rest in the shade while we tried some lemonade." Now, that rhymed itself — you must not lay it to me. When we were seventeen miles from home I told the children it was time for my forenoon nap. We were near Fairlawn, a place where I often stop for rest and refreshment. The good people there promised to have dinner ready by the time I woke up, and all together I managed to get the children to rest nearly an hour.

A little further along we stopped at Mr. Miller's, where they grew those beautiful cold-frame cabbage-plants last fall. The Wakefield cabbages were all sold, but they were just carrying into the city of Akron great beautiful heads of Early Summer by the wagon-load. There seemed to be quite a discrepancy between the prices we get for cabbage on our market-wagon and the price paid by the largest wholesale grocer in Akron. They said their first Wakefields brought them 60 cts. a dozen, but they finally got down to 30 cts. His great heads of Early Summer, weighing from 4 to 8 lbs. apiece, brought only  $2\frac{1}{2}$  cts. by the wagon-load. Now, the price that we receive at retail is from 10 to 20 cts. apiece; but this large wholesale dealer pays, say,  $2\frac{1}{2}$  cts. a head. He turns them over to the retail grocer at perhaps 4 or 5 cts. The retail grocer trims off some of the leaves so as to keep them looking nice and fresh, thus reducing the weight, and sends them all over the city to his customers (you know it is the fashion to deliver goods nowadays, even if it is only a spool of thread or a paper of pins), and gets 10 cts. a head. Now, it looks as if there were pretty good profits here, and I confess I think so still. But, dear friends, you have your choice. Those who grow the cabbages can run a wagon to the consumer, and deliver them direct, and get the big prices; and the consumer can, if he chooses, get acquainted with the gardener, and go or send

right to the grower and cut short the profits of the middleman. We all know this; but, notwithstanding, where a man grows cabbages by the acre he sooner or later prefers to sell them to somebody who will take the whole lot right off his hands, and let him go to work raising another crop where the cabbages grew.

A little further along I stopped at the Atwood celery-farm. Mr. Atwood says his ground does not produce celery as well as it did years ago; and he thinks even muck land does better under some system of rotation. I found him and his men in the bunch-onion business. They have a fine crop of Southport White Globe onions, and they are putting three onions in a bunch, said onions being from the size of a hen's egg up to that of a small-sized goose egg. Such bunches retail for a nickel; but the man who grows them by the acre is glad to have them taken off his hands in quantities at *only a cent a bunch*. It is the same with cabbages. The middleman who consents to take these perishable goods by the wagonload must have a margin so he can deliver them at a low price to the retail grocer. The latter must have a profit, so that at times when they do not go off readily he can sell three bunches for a dime, or two for a nickel, when they begin to get a little old.

Mr. Atwood thinks that onions do finely after celery; and I suppose that, after growing onions for a while, the celery will be all right again.

While I talked cabbages and onions the children enjoyed themselves in exploring the gardens and grounds; and when I reached my cousin's farm, where Huber's cyclometer registered just 31 miles from our starting-point, the children felt so well that the two older ones declared they could turn right round and go back home before dark, and just enjoy the fun of it. I told them, however, they would do well if they made the trip after a good night's rest.

As our stopping-place was only three miles from Mogadore, Summit Co., O., my old boyhood home, we proposed to visit over there after supper. The children suggested taking their wheels; but I thought they had had wheeling enough that day. Mr. Wolf furnished us a big stout horse and surrey; and with his two children (a boy of twelve and a girl of seventeen) we had a merry party, I assure you. I presume the good people who lived in the cottage on the hill were somewhat surprised to see such a crowd marching into their quiet dooryard; but after I informed the good lady, that about fifty years ago my grandfather made my mother a present of that home, and that I lived there about 11 years during my childhood, she very courteously invited us to make ourselves at home all over the premises. Old familiar landmarks met me on every side. I walked around the octagon house, and climbed down the steps on the gravelly hillside; admired the beets, vineless sweet potatoes, lima beans, and other vegetables that still grew with such wonderful vigor on that gravelly hillside; then I pushed open an unused gate. After some groping among the bushes I found a well-remembered path, and



the children trailed after me down to the babbling brook. A good strong plank took us across to the old cold spring in the hillside. A little stone crock stood on a shelf above the spring. The dark-colored earthenware seemed to invite coolness. While dipping up the sparkling water I remembered the many times I have craved, especially during sickness, a cooling drink from that very spring. I passed the water around, and each and all declared they had never in their life tasted such refreshing spring water; and Huber said, "Why, pa, this is surely as cold as ice water." They had forgotten their ride of 31 miles, perhaps, and also that it was a hot July day; but, notwithstanding, I had to agree with them that that water was all my fancy and memory had painted it. I drank it again and again. The water from that spring does not need *boiling* to make it wholesome. And then I wondered if my digestion would not be good without the necessity of riding a wheel if I could live where I could drink daily from the waters of that celebrated Mogadore "cold" spring. The well-worn path down the hillside attests the fact that many besides myself had taken a fancy to this special spring. Cousin Wolf has a spring in a hillside right close to his dwelling; but the waters are hardly equal to those of this particular one I have been talking about. He was a little surprised when I told him that, for the small sum of \$9.00, he could get a little hydraulic ram that would send the water all over his house, and all over his farm, for that matter. Of course, the expense of the piping would be extra. We sat out under the shade-trees talking over old times. The young ladies thought they would retire; but Huber, as he lay in the hammock, said he thought he would not go to bed till "pa did." When I was ready to go, however, he did not respond. My cousin called to him; then he shook him. Finally I gave him a shake, and then—what do you think? Why, he declared he had not been asleep at all, and was sure he heard all we had been talking about; and I think he did—fifteen or twenty minutes before he needed such a shaking. I tell you, friends, a boy of fourteen, who is growing like a weed, needs lots of sleep, especially after he has ridden over thirty miles on the wheel in one day. By the way, dear father and mother, let me suggest to you to give the boy, and girl too, all the sleep they need when they are in their teens. Would you think it any thing strange if I were to tell you a little care to give them plenty of sleep and rest when they are growing so rapidly might lay the foundation for robust health and usefulness in later years?

Next morning the children were all right, and wild to try their wheels again; but Mr. Wolf promised to take us to visit Wilbur Fenn's if we would wait an hour or two. On the way we picked up my relative, Dennis Fenn, and a little later we ran across Mr. Metlin, so we finally had five potato-growers together in council. I have not space to give you all of that talk; but I will *take* space to give you just one little item to show you how intricate and complicated is the matter of growing just a crop of potatoes.

Cousin Fenn took us over to a nine-acre field. The greater part of this field looked as his fields usually do. Every hill of potatoes was so much like its neighbors that there was scarcely a choice between them—no bugs, a perfect stand, all bright and thrifty. At one end of the field, however, there were perhaps twenty or thirty rows that were not up to the standard. You could tell the dividing line clear through the field. I suggested there was a different kind of seed. He shook his head. "Planted at a different time?" he shook his head again.

"Well, Wilbur, what makes the difference?"

He answered something as follows:

"You see, I have always advocated planting potatoes in loose ground. I did not believe it was best to roll the ground at all. I wanted it so the potatoes could expand and enlarge symmetrically without being squeezed out of shape by uncongenial surroundings. I put in my planter and started to plant the field without rolling the ground. When I had got thus far I did not feel quite suited with the way things were going, and so hitched on to the heavy roller, and rolled the rest of those nine acres. You see the result."

Now, this would seem incredible were not the object-lesson right before our eyes. Without a question, the use of that roller on that field of nine acres more than paid for itself in growing this one crop of potatoes. I strongly suspect that the low yield of potatoes per acre throughout our State of Ohio is owing to the fact that the farmers who grow them are so poorly supplied with proper tools for pulverizing and fining up the soil.

Finally the children were delighted to be permitted to step out of the buggy and take their wheels once more. We just flew over the cinder wheel-path between the White Grocery and Middlebury; and when we came on to the paved streets on the side of Akron toward our home, Miss Rena would anticipate me and run up hill like a young colt that had got started for home. I tried to have her stop long enough to see the beautiful residences along the suburbs of that Akron road, but I could not hold her back. We took a hasty dinner where we had dined the day before; but when about ten miles from home it was evident that the girls were becoming tired. We took long rests under the shade-trees beside the road. We washed our faces in the babbling brooks coming from hill-side springs, and I for one had a really restful holiday. We reached home at five o'clock, having made about 65 miles in two days. All declared they would like the fun of doing it all over again.

Now, dear friends, if your boys or girls are crazy for a wheel, give them the means if you can of earning one; and when they get it, watch over them and see that they make a proper use of this wonderful new gift that has so recently come from the kind Father above; and when the wheel comes, teach the children to make a good use of it. Do not let them ride far at a time. Have them take plenty of sleep and rest. Don't let them undertake a century in one day until they are men and women grown; but before that time have

them trained in the fear of the Lord so that never, under *any* circumstances, will they think of undertaking a century run *on Sunday*.

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## OUR NEIGHBORS.

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Thou shalt love thy neighbor as thyself.—MATT. 19:19.

For several years past I have had invitations to visit the great seedsmen, and look over their trial-grounds around the city of Philadelphia. There are perhaps more prominent seedsmen congregated in this city than in any other one spot on the face of the earth. I was told the best time for me to visit would be during the month of August. On Monday morning, Aug. 2d, while at the breakfast-table I noticed a low rate on account of the meeting of the League of American Wheelmen. To take advantage of this low rate I should have to go during the first week in August; and to be sure and get around without being away from home over Sunday, it was needful I should start in the fore part of the week. So all of a sudden I made my preparations and was off. Now, I do not propose in this department to tell you much about my visit to the wonderful gardens and seed-growing farms; but I will tell you of these things later. I love to study plants and high-pressure gardening; but I love to study humanity and my "neighbors" still more.

I soon found myself among a crowd of more than ten thousand boys and girls who love to ride the wheel. Some of them were doubtless pretty well along in life; but with their wheeling-suits they seemed to be youthful, at least for the time being. Perhaps I should tell you that I am and have been a member of the L. A. W. almost since it started. Of course, I am not in sympathy with Sunday riding nor with the racing business, as a rule; but for all that, I am in deep sympathy and in touch with all these people who are finding health, strength, and happiness through the proper use of the wheel. I am also in deep sympathy with the movement that the L. A. W. has inaugurated in the way of better roads and freer communication with our neighbors and the whole outside world.

I have frequently spoken of the facilities for wheeling in this, that, and the other location. I said the sandy desert of Arizona, in special localities, was the finest place for wheeling in the whole wide world; and when down in Florida I spoke with enthusiasm of the sandy beach, just as it was left by the briny ocean waves, so hard and firm that the wheel passed over it without leaving even a visible track; but when I got outside of the city of Philadelphia, and tried their beautiful cement roads, with their graceful curves up and down the slopes, with the green lawns and brilliant arrangement of flowers and foliage, with beds on either side, I decided I should have to take it all back, and admit that the suburbs of Philadelphia come nearer to being the wheelman's paradise than any other spot I have

ever viewed on the face of the earth. It would have done you good to see the way in which the boys and girls congregated there and enjoyed this privilege. Not only all day long were they seen spinning and flying in every direction, but even late at night. Yes, I myself was out until between ten and eleven on two or three occasions; and even at these hours wheels were flying with boys and girls. There were tandems in great numbers, and the front seat was almost always occupied by a pretty woman with her brother, husband, or lover—of course I could not tell which—just back of her. With every crowd of boys there were almost sure to be two or three girls; and may be this accounts for the fact that, during my stay of three days in the city, my ears were only once pained by hearing an oath, and this once was by an outsider and not by one of the wheelmen. May God be praised for so much; and if the constant presence of womankind among the boys out on their sports and recreation had something to do with the circumstance, then I am glad that it is the fashion to take the girls along, even in our athletic sports.

As soon as I arrived in the city I saw banners in every direction proclaiming, "Welcome, L. A. W." Hotels had the same welcome, with reduced rates, and the restaurants made it a business to provide a special low-rate dinner especially for the wheel-riders. Rides were planned on the steamers to the various pleasure-resorts, free to every one who showed his L. A. W. ticket. This ticket, let me explain, is given to every subscriber to the spicy little magazine entitled *The L. A. W. and Good Roads*.

Before I go any further, permit me to say that my heart has been rejoiced during the present year to know that the president of this great organization is a Christian man; and he has been doing some grand work in the line of discouraging Sunday centuries, as well as all kinds of Sunday racing, and things of like import.

Wednesday evening we had a beautiful boat-ride up the Delaware River, and then back again *down* the river to Washington Park. This park is an immense garden in the shape of a pleasure-resort. The ground around and between the trees is all covered with a smooth floor which is kept constantly neatly swept. Abundance of shade, excellent water, refreshing drinks, with ice-cream and refreshments in general, make it a pretty place right up to the water's edge. A Ferris wheel, very much like the one in Chicago (only 10 cts. for a ride), receives, of course, a large patronage. Toboggan-slides that start away up above the tree-tops, send boat-loads of passengers down a long steep incline with terrific speed, landing them in the waters of the little artificial lake. The boat strikes the water with such force that it skips with its living freight away up into the air, and bounds and rebounds again and again. Of course, the water flies in great torrents in every direction except toward those in the boat. With the splashing of the water, and the shrieking of the boys and girls inside, it makes a most animated scene.



When the boat was pretty well loaded, so the rebound was unusually great, it seemed as if some of the inmates were thrown nearly two feet above their seats; but as they clung together, and came down all right with no one hurt, the program kept being repeated all day and away into the night. Finally, when it was announced that one of our expert cyclers was to ride down that incline on a *wheel*, great crowds gathered all around the banks of the lake. We were afraid we should not be able to see him clearly; but when we found he carried a lot of fireworks attached to either handle-bar we were pretty well satisfied in this respect. Down, down he went, with terrific speed. It made me think of some of my adventures in going down long steep hills. Just when everybody was holding his breath, when the wheel was up to its very highest speed, the rider dropped his fireworks, and sprang from his wheel just in time to dive down into the water. He came up safe and sound somewhere out in the middle of the pool, then swam ashore while a boat near by fished out of the water his dripping wheel. Then the crowd was called up to witness the play of the electric fountains. This was much like the one at the World's Fair, except that it was much more elaborate. While we sat entranced by the brilliant sparkling sprays of the water, listening in the meanwhile to the most exquisite strains of music from one of the finest bands the world can probably furnish, through the misty waters some dim phantom-like object seemed slowly rising. Was it imagination? or were there really some letters that meant something through that sparkling, radiant combination of rainbow colors and sparkling waters? Oh, yes! there were the words, "Welcome, L. A. W.," rising right out of the water; yes, and there seemed to be human hands holding aloft a beautiful banner; and finally up out of the water itself came three Graces in woman form—veritable mermaids rising up out of the depths of the sea, holding aloft their banner. Somebody who stood by me said, "Surely, they can not be living figures, although they are astonishingly true to life." But at just that moment the central goddess—yes, she would have made a very good Goddess of Liberty—waved her hand and bestowed a most bewitching smile upon the crowds of American wheelmen. Now, this naiad who rose up out of the water was not clothed with very much of any thing; in fact, a water-nymph would not be supposed to need *very much* drapery, even though she appeared before a great audience. The dazzling spray and the rippling water clothed her as with a halo. I suppose you know your old friend who writes these Home Papers has been more or less critical in regard to things of this kind—circuses, theaters, and the like. Well, for once I was somewhat puzzled. The mechanical effects produced by these wonderful electric fountains were grand, and there was nothing objectionable about them. The accompanying music was also entrancing. The beautiful grounds and shade-trees seemed to make the place a little paradise on earth; and that figure of the beautiful woman, so artisti-

cally combined with the other environments, need not necessarily have been objectionable. If I am making any mistake, I pray that the Holy Spirit may set me right.

The next day our good friend Selser, who represents our Philadelphia house, insisted that I must make at least a brief visit to Atlantic City before leaving Philadelphia. He did not tell me what I should see, but asked me to trust him. Our passage of 60 miles was made in 55 minutes, including one stop; and this railway, so straight and level and beautiful in all its appointments, is in the habit of making this speed right along. If I am correct, it is the fastest train in the world.

Atlantic City is a place of 200,000 people—at least, that is the number at this season of the year. In the winter time it shrinks down to *twenty* thousand. I will tell you why; it is one of the most celebrated bathing-places in the world. It is all hotels, bathing-houses, and such places of business as usually congregate under such circumstances. When I first caught sight of a group of perhaps fifty or a hundred bathers on the shore, I wanted to stop a little; but friend Selser had a different plan. "Come," said he; "let us take a little stroll through 'Vanity Fair.' Perhaps that is not quite the proper name, but it may make you think of it. We will look at the bathers a little further on."

I have not time here to describe the beautiful pavilions, machinery of all sorts for pleasure and recreation, curiosities exhibited for sale from all parts of the earth, mechanical inventions in the way of electricity, chemistry, optics, etc. Finally we came to the center of attraction. Almost as far as the eye could reach, human beings were down in the surf getting health and recreation amid the deafening roar of the salt-water breakers. Hundreds does not tell the story. There were literally thousands of human beings, all mixed up, some under water, some on top of it, and all enjoying themselves. Mr. Selser did not urge; but when I expressed a wish to join them he said "All right." There was such a crowd for bathing-suits that we had to wait quite a spell. I soon became accustomed to men and women all around me in their novel dresses (or *undress*,) looking like a lot of frolicsome juveniles instead of grown-up men and women. My preconceived notions for a while rebelled against this sudden departure from ordinary decorum, but I made up my mind that it was my business to observe and inquire, rather than to criticise. The first thing that struck me was that such a bathing-place is of itself a great leveler. Poor people and rich people, as well as old and young, were all mixed up indiscriminately. The millionaire and his wife and daughters, when they threw off their costly clothing, also threw off, at least to a certain extent, their pride—and I came pretty near saying arrogance. May be it *is* the right word. It took me a little time to get over the chill of first going into the briny water; and, remembering that I had only recently thrown off my overcoat and fur cap, I felt a little anxiety. In a short time, however, I was tumbling around with the rest,

and laughing and shouting until I almost forgot to shut my eyes and mouth and hold my breath when the big foamy billows came surging over us. Friend Selser kept urging me to turn my back toward the wave when I saw it coming, for it might strike with such force as to hurt my face. There are two ways of meeting breakers. One is to dive through them, and the other is to jump up so your head comes out of the way of the water. At every wave, more or less of us tumbled down and got mixed up. Oh! but didn't we get clean with that tremendous washing and rinsing from the briny waves? Some of us were awkward, but nobody seemed disposed to be touchy or to complain. There seemed to be the utmost good nature prevailing everywhere. Everybody laughed at all that happened. Once or twice I saw some awkward country youth back up so as to jostle some fine lady, evidently of rank and culture; but his awkward apology was always accepted, even if it was hardly what the circumstances seemed to warrant; and with all the haps and mishaps of that delightful day I did not hear one unkind or even despondent remark. I am not sure that I even saw a despondent look.

Oh, dear me! why didn't it so happen that I might take a salt-water bath every day in the year? Now, then, is there any thing wrong about having all humanity bathe together in this promiscuous way? When you become accustomed to it, everybody seems at least decently and becomingly clad—that is, for the time being. If we would all remember to clothe our minds and *thoughts* in such a garb as we are sure would be pleasing to the great Father above, it would not matter so very much about this matter of dress. If everybody loved his neighbor with a pure and holy love (as in the language of our text), woman's dress might conform to season and circumstances, at least far enough to allow her to move easily and gracefully through her vocations in life. Perhaps we should need more often to pray, "Create in me a clean heart, O God, and renew a right spirit within me;" but such a prayer would only bring us nearer to God; and any circumstance or set of circumstances that would drive us oftener to the throne of grace might be a blessing in itself.

(Continued in our next.)



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